CRESCENT
COLLEGE OF ACCOUNTANCY

CAF-01

Financial Accounting & Reporting - I

Volume-1

Study Notes,
Examination
Questions & Answers

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CHAPTER # 01

IAS-16

PROPERTY PLANT & EQUIPMENT

LO1: DIFFERENCE BETWEEN CAPITAL AND REVENUE EXPENDITURE

Capital expenditure

It is cost of buying fixed assets. It includes all expense incurred in bringing it in workable condition and location.

Revenue expenditure

Expenditure which is incurred in running the business on a day-to-day basis and its benefit is not spread over more than one year.

The difference between revenue expenditure and capital expenditure can be seen clearly with the total cost of using a van for a business. To buy a van is capital expenditure. The van will be in use for several years and is, therefore, a fixed asset. Paying for petrol to use in the van is revenue expenditure. To get the van repaired is revenue expenditure.

Example

Expenditure	Type of Expenditure
1. Buying van	Capital
2. Petrol costs for van	Revenue
3. Repairs of van	Revenue
4. Buying machinery	Capital
5. Electricity bill paid of using machinery	Revenue
6. Painting outside of new building	Capital

You already know that revenue expenditure is chargeable to the Profit and Loss Account by increasing expense, while capital expenditure will result in increased figures for fixed assets in the Balance Sheet. It is, therefore, important that this classification is correctly done.

Question-1

Some of the following items should be treated as capital and some as revenue. For each of them state which classification applies:

(a) The purchase of machinery for use in the business.
(b) Carriage paid to bring the machinery in (i) above to the work.
(c) Complete redecoration of the premises at a cost of Rs. 1,500.
(d) A quarterly payment for heating.
(e) The purchase of a soft drinks vending machine for the canteen.

Question-2

Indicate which of the following would be revenue items and which would be capital items in a wholesale bakery:

(a) Purchase of a new van.
(b) Cost of painting business's name on new van.
(c) Repair and maintenance of existing van.

Question-3

State the type of expenditure, capital or revenue, incurred in the following transactions

(a) Van purchased.
(b) Repairs to a fruiterer's van.
(c) The cost of installing a new machine.
(d) Cost of hiring refrigeration plant in a butcher's shop.
(e) Twelve dozen sets of cutlery, purchased by a catering firm for a new dining-room.
(f) A motor vehicle bought for re-sale by a motor dealer.

Question-4

State which of the following you would classify as capital expenditure.

(a) Cost of building extension to factory.
(b) Purchase of extra filing cabinets for sales office.
(c) Cost of repairs to accounting machine.
(d) Legal fees paid in connection with factory extension.

Question-5

For the business of J Charles, wholesale chemist, classify the following between 'capital' and 'revenue' expenditure:

(a) Purchase of an extra van.
(b) Carriage costs on bricks for new warehouse extension.
(c) Carriage costs on purchases.
(d) Carriage costs on sales.
(e) Legal costs of collecting debts.
(f) Legal charges on acquiring new premises for office.
(g) Fire insurance premium.
(h) Costs of erecting new machine.
(i) Clearing agent charges
(j) Insurance in transit

Question-6

Classify the following items as either revenue or capital expenditure:

(a) An extension to an office building costing Rs. 24,000.
(b) Repairs to the warehouse roof.
(c) Annual service costs for a courier firm's fleet of vans.
(d) A new bicycle purchased by a news agent for use by the newspaper delivery boy.
(e) Wages paid to employees who worked on the construction of their company's new office building.

Answer-1	Capital (a), (b), (e)	Revenue (c), (d)
Answer-2	Capital (a), (b)	Revenue (c)
Answer-3	Capital (a), (c), (e)	Revenue (b), (d), (f)
Answer-4	Capital (a), (b), (d)	Revenue (c)
Answer-5	Capital (a), (b), (f), (h), (i), (j)	Revenue (c), (d), (e), (g)
Answer-6	Capital (a), (d), (e)	Revenue (b), (c),

LO2: DETERMINING COST OF ASSET

Fair value is the amount for which an asset could be exchanged between:

- *knowledgeable*
- *willing parties*
- *in an arm's length transaction.*

Property, plant and equipment are tangible items that:

(a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and

(b) are expected to be used during more than one period.

Recording in Books—

Recognition

The cost of an item of property, plant and equipment shall be recognized as an asset if and only if:

(a) It is probable that future economic benefits associated with the item will flow to the entity; and

(b) The cost of the item can be measured reliably.

INITIAL MEASUREMENT OR MEASUREMENT AT RECOGNITION

An item of property, plant and equipment that qualifies for recognition as an asset shall be measured at its cost.

Cost

Cost is the amount of:

- *cash or cash equivalents paid or*

- *the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction.*

Elements of Cost:

The cost of an item of property, plant and equipment comprises:

(a) *Its purchase price, including import duties and non-refundable purchase taxes after deducting trade discounts and rebates or subsidy.*

(b) *Any costs necessary to bring the asset into current location and condition which is intended by management.*

(c) *The initial estimate of the costs of dismantling and removing the item and restoring the site.*

Examples of directly attributable costs are:

(a) *Costs of employee benefits arising directly from the construction or acquisition of an item of property, plant and equipment.*

(b) *Costs of site preparation*

(c) *Initial delivery and handling charges.*

(d) *Installation and assembly cost.*

(e) *Cost of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced (such as samples produced when testing equipment); and*

(f) *Professional fees.*

Examples of costs that are not costs of an item of property, plant and equipment are:

(a) *Costs of opening a new facility.* ⇒ ceremony

(b) *Cost of introducing a new product or service (including costs of advertising and promotional activities);*

(c) *Costs of conducting business in a new location or with a new class of customer (including costs of staff training); and*

(d) *Administration and other general overhead costs. e.g., staff training cost*

Following costs are not included in the carrying amount e.g.,

(a) *Costs paid while an item is yet to be brought into use or is operated at less than full capacity.* Advance for asset

(b) *Initial operating losses while demand for the product's output builds-up; and*

(c) *Costs of relocating/re-organizing part or all of entity's operations.*

Recognition of costs in the carrying amount of an item of property, plant and equipment ceases when the item is ready for use (i.e. it is capable of operating in manner intended by management).

Example

A new machine is purchased by Arman Enterprise. Relevant details are as follows:

List price	800,000
Trade discount	10%
Import duties	2,000
Cost of site preparation	1,000
Architect fee	1,000
Non-refundable taxes	6,300
Income tax adjustable (refundable)	5,000
Insurance in-transit	7,000
Fees paid to clearing agent	9,000
Octroi charges	4,600
Land preparation cost	8,300
Installation cost	7,800

Estimate of initial cost of dismantling which company is liable to pay	5,000
Cost of furniture broke down during handling the machine	7,000
Insurance for the year	9,000
License fee for the year	11,000
Initial operating losses	12,000
Trial production cost net of sale proceeds of prototype/sample (4,000 – 2,100)	1,900
Admin costs	10,000

Calculate the cost at which machine should be debited?

Answer

Cost of machine is calculated as below:

	Rs.
List price	800,000
Less: Trade discount	(80,000)
Import duties	2,000
Cost of site preparation	1,000
Architect fee	1,000
Non-refundable taxes	6,300
Insurance in-transit	7,000
Fees paid to clearing agent	9,000
Octroi charges	4,600
Land preparation cost	8,300
Installation cost	7,800
Estimate of initial cost of dismantling	5,000
Trial production cost net of sale proceeds of prototype/sample (4,000 – 2,100)	1,900
Total	**773,900**

Cost of self-constructed asset

The cost of a self-constructed asset is determined by adding up raw material, labour and overhead costs incurred on that asset.

Example (Self-constructed Asset)

Roads International Limited constructed its own specially designed 'road bulldozer'. Details of related costs incurred are as follows:

Description of cost:	Rs.
Cost of raw materials purchased	500,000
Cost of raw materials used in construction of road bulldozer	100,000
Overhead costs incurred on building road bulldozer	40,000
Tests to ensure road bulldozer safe before brought into use	20,000
Factory labour costs	300,000

Additional information:

- 80% of the total labour costs for the year were incurred on building roads and 20% thereof were incurred in construction of the road bulldozer.
- The road bulldozer was first brought into use on a contract that started on 1 November 20X2, although it was available for use from 1 October 20X2.
- The company uses the straight-line method to depreciate its road bulldozer. This vehicle is expected to be sold for Rs. 7,000 at the end of its expected useful life of 5 years.

Required:

Journalize transactions related to road bulldozer for the year ended 31 December 20X2.

Answer

Roads International Limited
Accounting entries
For the year ended 31 December, 20X2

Particulars	Dr.	Cr.
Raw materials	500,000	
Bank		500,000
(Payment of raw material purchased)		
Road bulldozer	100,000	
Raw materials		100,000
(Raw material used in construction of Road bulldozer)		
Road bulldozer	40,000	
Bank/payable		40,000
(Overhead costs incurred on building road bulldozer)		
Road bulldozer	20,000	
Bank		20,000
(Safety test performed cost)		
Labour cost	300,000	
Bank/payable		300,000
(Labour cost paid over the year)		
Road bulldozer (300,000 x 20%)	60,000	
Labour cost		60,000
(Labour cost incurred on construction of Road bulldozer)		
Depreciation expense	10,650	
Accumulated dep. - Road bulldozer (220,000- 7,000)/5 × 3/12)		10,650
(Recording of depreciation on Road bulldozer)		

Note: The Road bulldozer was available for use from 1 October 20X2, therefore depreciation shall commence from that period.

Workings

Cost of bulldozer 100,000 + 40,000 + 20,000 + 60,000 **220,000**

SUBSEQUENT EXPENDITURE

Subsequent costs normally include:

a. Repair and maintenance – Expense out
b. Expenditure to improve asset - Capitalize
c. Replacement of a part - Capitalize

LO 3: DEPRECIATION AND ITS METHODS

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life.
Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value.
Residual value of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal.
Note: If residual value is equal to or greater than cost than no depreciation is charged.
Carrying amount is the amount at which an asset is recognized after deducting any accumulated depreciation and accumulated impairment losses. (Commonly known as book value).
Useful life is the period over which:

(a) an asset is expected to be available for use by an entity; or
(b) the number of production or similar units expected to be obtained from the asset by an entity.

DEPRECIATION

(a) *Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost shall be depreciated separately.*

(b) *The Depreciation charge for each period shall be recognized in profit or loss unless it is included in the carrying amount of another asset.(e.g. the depreciation of manufacturing plant and equipment is included in the costs of conversion of inventories)*

(c) *The depreciable amount of an asset shall be allocated on a systematic basis over its useful life.*

(d) *The residual value and the useful life of an asset shall be reviewed at least at each financial year-end and, if expectations differ from previous estimates, the change(s) shall be accounted for as a change in an accounting estimate.*

(e) *Commencement and cessation of deprecation*

Depreciation of an asset begins when it is available for use, i.e. when it is in the location and condition necessary for it to be capable of operating in the manner intended by management.

Depreciation of an asset ceases the date when the asset is disposed off. Therefore, depreciation does not cease when the asset becomes idle or is retired from active use unless the asset is fully depreciated. However, under usages methods of depreciation the depreciation charge can be zero while there is no production.

(f) *The following factors are considered in determining the useful life of an asset*

- (a) *Expected usage of the asset. Usage is assessed by reference to asset's expected capacity or physical output*
- (b) *Expected physical wear and tear,*
- (c) *Technical or commercial obsolescence*
- (d) *Legal or similar limits on the use of the asset,*

(g) *Land and Buildings are separable assets and are accounted for separately, even when they are acquired together.*

Land is not normally depreciated because it has indefinite life.

(h) *The depreciation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity.*

The depreciation method applied to an asset shall be reviewed at least at each financial year-end and, if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the method shall be changed to reflect the changed pattern. Such a change shall be accounted for as a change in an accounting estimate.

Depreciation methods

Following are the depreciation methods to be used during the period an asset is used by an entity:

(a) Straight line method

It requires allocation of an equal amount to each period. Since this method assumes that the cost of the asset expires at a steady (straight line) function of time, the cost less residual value is divided by the estimated useful life. The rate of depreciation is the reciprocal of the estimated useful life. If the useful life of an asset is 10 years, the depreciation rate will be 1/10 or 10%.

$$\text{Depreciation} = \frac{\text{Cost} - \text{Residual value}}{\text{useful life}} \text{ or (Cost - Residual value) x Rate of depreciation}$$

(Whenever depreciation is charged "on cost" each year, it means the entity is following straight line method assuming that residual value is nil).

This method is appropriate for those assets which give same benefit in each year e.g. building, furniture etc. *[Refer Q.1-5 of practice set]*

(b) **Diminishing balance method**

Under this method, instead of a fixed amount, a fixed rate on the reduced balance of the asset is charged as depreciation every year. Since a constant percentage rate is being applied to the written down value, the amount of depreciation charged every year decreases over the life of the asset.

This method is appropriate for those assets which give benefit on a reducing pattern each year e.g. machines.

[Refer Q. 19-24 of practice set]

Points of differences among straight line method and WDV method

Description	Straight line method	WDV method
Calculation of depreciation for 1st Year	$\frac{\text{Cost} - \text{Residual value}}{\text{useful life}}$ OR (Cost – Residual value)× (Dep Rate)	Cost × Rate of depreciation
Calculation of depreciation for Subsequent Years	$\frac{\text{Cost} - \text{Residual value}}{\text{useful life}}$ OR (Cost – Residual value)× (Dep Rate)	WDV × Rate of depreciation
Conversion of life to rate	Rate in % $= \frac{1}{\text{useful life}} \times 100$	N/A
Calculation of depreciation for each year	- On Cost of opening assets less cost of disposals and fully depreciated assets - On cost of additions - On cost of disposals - On cost of fully depreciated	- On WDV of opening assets at the start of year less WDV of disposals at the start of year - On cost of additions - On WDV of disposals at the start of year
	(In case assets have residual value it will be deducted from the cost to calculate depreciation)	
If no rate is given in WDV method		Depreciation rate % $= 1 - \sqrt[n]{\frac{S}{C}}$ S = scrap value C = Cost
If scrap value is not given rather WDV or accumulated depreciation is given		$r = 1 - \sqrt[\text{cumulative period}]{\frac{WDV}{Cost}}$ $r = 1 - \sqrt[\text{cumulative period}]{\frac{Cost - Acc.\ Dep.}{Cost}}$
Calculation of accumulated depreciation at the time of disposal	It can be calculated through a shortcut working: Accumulated depreciation at the time of disposal = (Cost – RV) × Rate × No. of years used Number of years used will be counted from date of purchase till date of disposal.	It will be calculated through manual working from the date of purchase till the date of disposal.
Concept of fully depreciated assets *	Applicable	Not applicable

***Example of fully depreciated**

Mr. Asif purchased an asset on 01.01.08 for Rs. 900. Its life is 3 years and it sold on 30.06.12 for Rs. 30.

Method is straight line.

Required:

Prepare relevant accounts from the date of purchase till the date of disposal.

Answer

Asset a/c

Dr.					Cr.
01.01.08	Cash	900	31.12.08	c/d	900
01.01.09	b/d	900	31.12.09	c/d	900
01.01.10	b/d	900	31.12.10	c/d	900
01.01.11	b/d	900	31.12.11	c/d	900
01.01.12	b/d	900	30.06.12	Disposal	900

Accumulated Depreciation

Dr.						Cr.
31.12.09	c/d	300	31.12.08	Dep.	(900/3)	300
			01.01.09	b/d		300
31.12.09	c/d	600	31.12.09	Dep.	(900/3)	300
			01.01.10	b/d		600
31.12.10	c/d	900	31.12.10	Dep.	(900/3)	300
31.12.11	c/d	900	01.01.11	b/d		900
30.06.12	Disposal	900	01.01.12	b/d		900

Disposal A/c

Dr.			Cr.
Asset	900	Accumulated Depreciation	900
P/L (Bal.)	30	Cash	300

(c) Output method

This is a method of providing depreciation on annual machine's output in use compared with total anticipated machine's output over the life of the machine. [Refer Q. 30 of practice set]

$$\text{Depreciation} = \frac{\text{Cost} - \text{Residual value}}{\text{Total output expected over useful life}} \times \text{Units produced during the year}$$

Example

Mr. Asif has acquired a machine on 1.Mar.2011. Its total capacity is to produce 50 units over 4 years. Year end is December 31.

Expected units to be produced are:

Year end	Units
December 31, 2011	12
December 31, 2012	24
December 31, 2013	4
December 31, 2014	10

Cost of machine is Rs.70,000 with a residual value of Rs. 5,000.

Required:

Calculate depreciation for first 4 years using output method.

Answer

Depreciation	-	2011	$\left(\frac{70,000-5,000}{50}\right) \times 12$	= 15,600
	-	2012	$\left(\frac{70,000-5,000}{50}\right) \times 24$	= 31,200
	-	2013	$\left(\frac{70,000-5,000}{50}\right) \times 4$	= 5,200
	-	2014	$\left(\frac{70,000-5,000}{50}\right) \times 10$	= 13,000

(d) Sum of year digit method

This method assumes that the depreciation charge should be more in the early years of the life of the asset. Under this method, the depreciation expense is calculated by multiplying the depreciable amount by a fraction based on the sum of the number of periods of the useful economic life. [Refer Q. 31 of practice set]

$$\text{Depreciation} = \frac{\text{Cost} - \text{Residual value}}{\text{sum of all year's digits}} \times \text{respective digit} \quad \textbf{sum of all digits} = \left(\frac{n(n+1)}{2}\right)$$

Example

Mr. Akif purchased a machine for Rs. 100,000 on 1.1.2004. Its residual value is Rs. 5,000. Its useful life is 4 years.

Calculate depreciation expense for first 4 years using sum of year digit method. Year end is December 31.

Answer

Depreciation	-	2004	$\left(\frac{100,000-5,000}{10}\right) \times 4$	= 38,000
	-	2005	$\left(\frac{100,000-5,000}{10}\right) \times 3$	= 28,500
	-	2006	$\left(\frac{100,000-5,000}{10}\right) \times 2$	= 19,000
	-	2007	$\left(\frac{100,000-5,000}{10}\right) \times 1$	= 9,500

Note:

(i) Diminishing balance method and year digit method are often termed as "accelerated depreciation methods" because both of the methods give more depreciation in the earlier years than the later one.

(ii) At the end of life of asset, the written down value of asset will be equal to its residual value.

(iii) No depreciation will be charged on assets after they have completed their life whether in terms of years, units, hours etc.

(iv) In the year of acquisition and disposal depreciation will be charged only for the months asset is used.

Important issue regarding calculation of depreciation

It is not fair to assume that a fixed asset is always purchased on the very first day of a month. Assets are generally purchased in the course of the accounting period whenever required. When an asset is purchased in mid of a month, it is not necessary to compute the amount of depreciation to be charged to the nearest day or week. As we know, the charge for depreciation is a mere estimate, therefore, depreciation is calculated in whole months.

In this case you can give a note that:

"Full month's depreciation is charged in the month of purchase while no depreciation is charged in the month of disposal."

Example

Assume year end is December 31st and following are the dates of additions and disposals.

Additions	Date of purchase	Number of months for which depreciation should be charged
Car-7	March 13, 2013	10
Car-8	July 3, 2013	6
Car-9	December 27, 2013	1

Disposals	Date of Disposal	Number of months for which depreciation should be charged
Car-2	April 9, 2013	3
Car-4	September 3, 2013	8
Car-1	October 26, 2013	9

COMPONENTS OF COST

Each part of an asset that has a cost that is significant in relation to the total cost must be depreciated separately. This means that the cost of an asset might be split into several different assets and each depreciated separately.

Example-1

A company has purchased a new aero plane for Rs.10 million.

The company has identified the following cost components and useful lives in respect of this jet.

	Rs. million	Useful life
Engines	3,000	5 years
Seats	1,000	3 years
Fittings	2,000	15 years
Other parts	4,000	20 years
	10,000	

Example-2 (Components of cost)

Ancient Waters Limited is a company involved in bottling spring water. The company purchased a bottling plant on 2 January 20X2. The plant is made up of three significant components, the cost of which is as follows:

Description of component	Cost price Rs.	Residual value Rs.	Expected useful life
Engine	1,500,000	500,000	5 years
Conveyor belt and fittings	2,000,000	0	8 years
Other structure	800,000	50,000	3 years

"Other costs" incurred in relation to the bottling plant are as follows:

Description of cost	Rs.	Transaction date
Delivery and installation	783,000	5 January 20X2
Staff training	60,000	16 January 20X2

Other information:

- The plant was available for use in production on 1 February 20X2, although production only began on 1 March 20X2.
- The plant was temporarily idle during October 20X2 when the factory closed down for its annual holiday period.
- The company uses the straight-line method when depreciating its bottling plant.

- All 'other costs' are considered to be incurred evenly between the three significant components of the bottling plant (i.e. where appropriate, a third of the cost is allocated to each component).

Required:

Show all related journal entries relating to the bottling plant for the year ended 31 December 20X2 and 31 December 20X3.

Answer-2

Journal entries

Date	Particulars	Dr.	Cr.
		Rs in '000'	
2/1/20X2	Engine	1,500	
	Conveyor belt and fittings	2,000	
	Outer structure	800	
	Bank		4,300
	(Purchase of bottling plant)		
5/1/20X2	Engine (783 × 1/3)	261	
	Conveyor belt and fittings (783 × 1/3)	261	
	Outer structure (783 × 1/3)	261	
	Bank		783
	(Delivery and installation charges)		
16/1/20X2	Staff training expense	60	
	Bank		60
	(Recording of staff training cost in P/L)		
31/12/20X2	Depreciation expense (W-2)	799.2	
	Accumulated depreciation – Engines		231.2
	Accumulated dep.- Conveyor belt and fittings		259.1
	Accumulated depreciation - Outer structure		308.9
	(Recording of depreciation)		
31/12/20X3	Depreciation expense (W-3)	871.8	
	Accumulated depreciation – Engines		252.2
	Accumulated dep.- Conveyor belt and fittings		282.6
	Accumulated depreciation - Outer structure		337.0
	(Recording of depreciation)		

(W-1) **Calculation of cost and depreciable amount**

	Engines	Conveyor Belt and Fittings	Outer Structure	Total
Cost price	1,500	2,000	800	4,300
Delivery and installation charges	261	261	261	783
	1,761	2,261	1,061	5,083
Less: Residual value	(500)	-	(50)	(550)
Depreciable Amount	1,261	2,261	1,011	4,533

(W-2) **Depreciation for the year ended 31 December, 20X2:**

Engines	((W-1) 1,261/5 × 11/12)	231.2
Conveyor belt and fittings	((W-1) 2,261/8 × 11/12)	259.1
Outer structure	((W-1) 1,011/3 × 11/12)	308.9
		799.2

(W-3) **Depreciation for the year ended 31 December, 20X3:**

Engines	((W-1) 1,261/5)	252.2
Conveyor belt and fittings	((W-1) 2,261/8)	282.6
Outer structure	((W-1) 1,011/3)	337
		871.8

LO4: RECORDING DEPRECIATION IN BOOKS OF ACCOUNTS

The depreciation for the period is debited to Depreciation expense Account and credited to 'Accumulated Depreciation Account'. Instead of crediting asset account another account styled Accumulated Depreciation Account is credited so that at any time during the life of an asset we can easily determine what is the total deprecation of asset on a specific reporting date. In the Balance Sheet, asset appears at its original cost and the accumulated depreciation is shown as a deduction from the Asset Account.

	Entry	Dr.	Cr.
1. Recording depreciation expense	Depreciation expense a/c	xxx	
	Accumulated Depreciation a/c		xxx

LO5: CHANGE IN ACCOUNTING ESTIMATE DURING THE PERIOD OF USE

At the end of an accounting year an entity may estimate a change in following as compared to what was expected at the time of purchase and may need to revise the following:

- Useful life
- Depreciation method
- Residual Value
- Depreciation rate

Scenarios		Formula to be used in the year of change
i)	If new method is straight line	$\frac{\text{WDV at time at the time the estimate is revised - New Residual value}}{\text{Remaining Useful Life}}$
ii)	If new method is WDV	WDV at the time the estimate is revised x New rate

Question-1

ABC Ltd. purchased an asset costing Rs.20,000 on 1.1.2007. Its useful life is 10 years and its residual value is Rs.5,000. On 1.1.2009 it is decided that remaining life is 4 years with a new residual value of Rs.6,000.

Calculate depreciation for 2007, 2008, 2009 and 2010.

Year end is December 31.

Answer-1

Depreciation – 2007 $= \frac{\text{Cost} - \text{RV}}{\text{Life}} = \frac{20,000 - 5,000}{10} = 1,500$

Depreciation – 2008 $= \frac{20,000 - 5,000}{10} = 1,500$

WDV at the time of change in estimate $= 20,000 - 1,500 - 1,500 = 17,000$

Depreciation – 2009	= WDV – new residual value / Remaining life	= 17,000 – 6,000 / 4	= 2,750
Depreciation – 2010		= 17,000 – 6,000 / 4	= 2,750

Question-2

A company uses straight line method with a rate of 12.5% on an asset costing Rs. 50,000 which is purchased on 1.1.2005. Its residual value is Rs. 10,000. On 1.1.2007, the company decided to change the method to WDV using rate of 15%.

Required:

Calculate depreciation expense for 2005, 2006, 2007and 2008. Year end is December 31.

Answer-2

Depreciation – 2005	= (50,000 – 10,000) × 12.5%	= 5,000
Depreciation – 2006	= (50,000 – 10,000) × 12.5%	= 5,000

WDV of asset at the time the method is changed.

WDV	= 50,000 – 5,000 – 5,000	= 40,000	
WDV(1.1.2007)			40,000
Less: Depreciation (2007)	(40,000 × 15%)		(6,000)
WDV (1.1.2008)			34,000
Less: Depreciation (2008)	(34,000 × 15%)		(5,100)
			28,900

Question-3

An entity owns an asset costing Rs. 50,000 which is purchased on 1.1.2010. Rate of depreciation is 28% under written down value method. On 1.1.2012 entity decided new rate of 40% without changing method of depreciation.

Calculate depreciation for 2010, 2011, 2012 and 2013. Year end is December 31.

Answer-3

Cost	(1.1.2010)		50,000
Depreciation	(2010)	(50,000 × 28%)	(14,000)
WDV	(1.1.2011)		36,000
Depreciation	(2011)	(36,000 × 28%)	(10,080)
WDV	(1.1.2012)		25,920
Depreciation	(2012)	(25,920 × 40%)	(10,368)
WDV	(1.1.2013)		15,552
Depreciation	(2013)	(15,552 × 40%)	(6,221)
WDV	(31.12.2013)		9,331

LO6: DISPOSAL BY SALE/ DISPOSAL BECAUSE OF DESTROY

DERECOGNITION

The item of property, plant and equipment shall be derecognized

(a) On disposal; or

(b) When no future economic benefits are expected from its use or disposal.

The gain/(loss) arising from the derecognition of an item of properly, plant and equipment shall be included in profit or loss when the item is derecognized. Gains shall not be classified as revenue.

The gain or loss arising from the derecognition of an item of property, plant and equipment shall be determined as the difference between the disposal proceeds and the carrying amount of the item.

Disposal by sale/destroy

If a fixed asset is sold or it is destroyed because of accident, fire or flood, we have to remove it from our ledger accounts. This means that the cost of that asset needs to be taken out of the asset account. In addition, the accumulated depreciation on the asset which has been sold will have to be taken out of the accumulated depreciation a/c. Finally, the profit and loss on sale, if any, will have to be calculated and posted to the profit and loss account.

	Entry	Dr.	Cr.
2. Entry for disposal of asset	Accumulated Depreciation a/c	xxx	
	Cash/Insurance claim receivable	xxx	
	P/L a/c (balancing)	xxx	
	Asset a/c – at cost		xxx
	(In case there is loss on disposal)		

Disposal a/c appears as follows:

Dr.	Disposal account		Cr.
Asset a/c (cost)	xxx	Accumulated depreciation	xxx
		Cash/Insurance claim receivable	xxx
		P&L (Bal. fig.)	xxx

Note: Insurance claim receivable will appear when an asset is destroyed and insurance company has acknowledged the claim and money is still receivable.

Note: Insurance claim receivable will not be considered as "other income" rather a reduction in loss on disposal.

Example-1

Mr. Zia has informed you that an asset costing Rs. 600,000 on 1.03.2004 is destroyed by fire on 30.09.2007. The insurance company acknowledged the claim at Rs. 35,000. Rate of depreciation is 20% straight line. Year end is December 31.

Required:

Pass the journal entry for disposal and prepare disposal a/c.

Solution

Journal entry

	Dr.	Cr.
Insurance claim receivable	35,000	
Accumulated Depreciation (W-1)	429,996	
P/L (Bal.)	135,004	
Asset a/c		600,000

(W-1) Accumulated Depreciation

Years used		3 years and 7 months
Accumulated Depreciation	(600,000 × 20% × 3.5833)	429,996

Dr.	Disposal – A/c		Cr.
Asset – cost	600,000	Accumulated Depreciation	429,996
		Insurance claim receivable	35,000
		P/L (Bal.)	135,004

Example-2

Mr. Latif has an asset costing Rs. 400,000 which was purchased on 1.04.2005. It was destroyed by fire on 30.06.2008 and he received Rs. 45,000 from insurance company in this respect. Year end is December 31.

Required:

Assuming depreciation rate to be 15% on straight line basis, prepare disposal entry. Also prepare disposal a/c?

Solution

Journal entry

	Dr.	Cr.
Cash A/c	45,000	
Accumulated Depreciation (W-1)	195,000	
P/L (Bal.)	160,000	
Asset a/c (Disposal of asset by fire)		400,000

(W-1) Accumulated Depreciation

Years used		3 years and 3 months
Accumulated Depreciation	(400,000 × 15% × 3.25)	195,000

Dr.	Disposal – A/c		Cr.
Asset	400,000	Accumulated Depreciation	195,000
		Cash	45,000
		P/L (Bal.)	160,000

Calculation of cost of disposals if book value of disposals is given [Reserve Back Working]

Sometimes in exam you might be given with the book value of assets sold and you may be required to calculate the cost of disposals to be credited in asset account.

Example-1

On September 30, 2006 various items of plant and machinery having a book value of Rs. 300,000 were sold for Rs. 70,000. These were purchased on 1.4.2004. Rate of depreciation is 10% on declining balance method. Year end is December 31. Calculate cost of disposals?

Answer

Cost of items	Rs.
Let the cost on 1.4.2004 be	100
Depreciation-2004 (100x10% × 9/12)	(7.50)
Book value 1.1.2005	92.50
Depreciation-2005 (92.5 × 10%)	(9.25)
Book value on 1.1.2006	83.25
Depreciation-2006 (83.25 × 10% × 9/12)	(6.2438)
Book value on disposal	77.0062

If book value is 77.0062 then it can be grossed up as follows to arrive at cost.

Cost (300,000 / 77.0062 × 100) 389,579

	%	Amount
Cost	100	389,579
Accumulated depreciation	(22.9938)	(89,579)
Book value	77.0062	300,000

Example-2

On September 30, 2006 various items of plant and machinery having a book value of Rs. 300,000 were sold for Rs. 70,000. These were purchased on 1.4.2004. Rate of depreciation is 10% on straight line method. Year end is December 31. Calculate cost of disposals?

Answer

Cost of items

Number of years the asset is used (1.4.2004-30.9.2006)	2.5Y
Assume Cost (in percentage)	100%
Accumulated depreciation at the time of disposal (in percentage) (100 × 10% per year × 2.5Y)	25%
Cost (300,000/75 × 100)	400,000

	%	Amount
Cost	100	400,000
Accumulated depreciation	(25)	(100,000)
Book value	75	300,000

LO7: DISPOSAL THROUGH EXCHANGE

Sometimes instead of selling we exchange the old asset with the new one. In this case normally we will receive new asset and will hand over the old asset to the person from whom new asset is bought. Obviously some cash will also be paid to settle the transaction. In this case following steps will be performed while passing the journal entry.

Step 1 The old asset will be removed from books by crediting old asset and by debiting accumulated depreciation a/c.

Step 2 The cash paid to settle the transaction will be credited.

Step 3 The cost of new asset will be debited in books.

Step 4 The balancing figure will be gain or loss.

	Entry	Dr.	Cr.
3. Entry on exchange of asset	Asset a/c (new)	xxx	
	Accumulated Depreciation a/c	xxx	
	P/L a/c (balancing)	xxx	
	Asset a/c (old)		xxx
	Cash		xxx
	(In case there is loss on disposal)		

T-accounts

Dr.	Asset account		Cr.
b/d	xxx	Disposal (cost old asset)	xxx
Disposal (cost new asset)	xxx		
		c/d	xxx

Dr.	Disposal account		Cr.
Asset a/c (cost old asset)	xxx	Accumulated depreciation (old asset)	xxx
Cash	xxx	Asset a/c (cost new asset)	xxx
		P&L (Bal. fig.)	xxx

Example-1

Following details are provided as on December 31, 2009.

Cost of machine	32,000
Accumulated depreciation	(8,000)
Book value	24,000

The above asset is exchanged with a new one on the same date:

Fair value of new asset	40,000
Cash paid to settle the transaction	22,000

Required: Pass the journal entry to record the transaction. (Source: ICAP)

Answer-1

Following entry will be passed:

	Dr.	Cr.
Cost- New asset	40,000	
Acc. dep. - old asset	8,000	
P and L (bal.)	6,000	
Cost - old asset		32,000
Cash		22,000

Dr.	Asset account		Cr.
b/d	32,000		
Disposal a/c	40,000	Disposal	32,000
		c/d (bal.)	40,000

Dr.	Disposal account		Cr.
Asset a/c (old)	32,000	Acc. Dep. – old asset	8,000
Cash	22,000	Asset a/c (new)	40,000
		P&L (Bal. fig.)	6,000

Example-2

Mr. Umer exchanged an old asset with a new one. Cost of old asset is Rs. 10,000 and accumulated depreciation is Rs. 3,000. Cost of new asset is Rs. 50,000. Cash paid to settle the transaction is Rs. 22,000. Pass Journal entry?

Answer-2

Asset – new		50,000	
Accumulated Depreciation		3,000	
P/L (Bal.)			21,000
Asset – old			10,000
Cash			22,000

Example-3

Mr. Arif exchanged an old asset with a new one. Cost at old asset is Rs. 10,000 and accumulated depreciation is Rs. 2,500. Cost of new asset is Rs. 30,000. Trade-in-allowance is Rs. 3,000. Pass journal entry?

Answer -3

Asset – new		30,000	
Accumulated Depreciation		2,500	
P/L (Bal.)		4,500	
Asset – old			10,000
Cash			27,000

Cash paid = New asset cost – Trade-in-allowance
= 30,000 – 3,000 = 27,000

Example-4

Mr. Usman Elahi exchanged an old asset with new one. Cost of old asset is Rs. 30,000 and its written down value is Rs. 12,000. List price of new asset is Rs. 40,000. Cash paid to settle the transaction is Rs. 23,000. Pass journal entry?

Answer -4

Asset – new		40,000	
Accumulated Depreciation	(30,000 – 12,000)	18,000	
P/L (Bal.)			5,000
Asset – old			30,000
Cash			23,000

Example-5

Mr. Nauman exchanged an old asset with new one. Cost of new asset is Rs. 100,000. Cost of old asset is Rs. 70,000 and its accumulated depreciation is Rs. 30,000 on date of exchange. Trade-in-allowance (value assigned to our old asset) is Rs. 10,000.

Answer -5

Asset – new	100,000	
Accumulated Depreciation	30,000	
P/L (Bal.)	30,000	
Asset – old		70,000
Cash (100,000 – 10,000)		90,000

Example-6

Mr. Anjum has provided following data:

	Cost	Accumulated Depreciation
	1.1.2011	
Vehicle	400,000	150,000

(1) A vehicle costing Rs. 90,000 on 1.4.2009 is exchanged with a new vehicle costing Rs. 200,000. Cash paid in the transaction amounted to Rs. 70,000. Date of exchange is 1.8.2011.

(2) A vehicle costing Rs. 60,000 is purchased on 1.3.2011.

Required:

Prepare Asset a/c, accumulated depreciation a/c and disposal a/c for the year ended 31.12.2011? Method of depreciation is 5% S.L.

Answer-6

Dr.		Vehicle a/c			Cr.
1.1.11	b/d	400,000	1.8.11	Disposal	90,000
1.8.11	Disposal	200,000			
1.3.11	Cash	60,000			
			31.12.11	c/d	570,000

Dr.		Accumulated Depreciation a/c			Cr.
1.8.11	Disposal (W-2)	10,500	1.1.11	b/d	150,000
			31.12.11	Depreciation Exp. (W-1)	24,792
31.12.11	c/d	164,292			

Dr.	Disposal a/c		Cr.
Vehicle	90,000	Accumulated Depreciation	10,500
Cash a/c	70,000	Vehicle	200,000
P/L (Bal.)	50,500		

Disposal entry

	Dr.	Cr.
Vehicle – new	200,000	
Accumulated Dep.	10,500	
Vehicle – old		90,000
Cash		70,000
P/L (Bal.)		50,500

(W-1) Depreciation Expense

- On opening assets excluding disposals (400,000 – 90,000) × 5%	15,500
- On additions (200,000 × 5% × 5/12) + (60,000 × 5% × 10/12)	6,667
- On disposals (90,000 × 5% × 7/12)	2,625
	24,792

(W-2) Accumulated Depreciation of Disposals

Years used (1.4.09 – 1.8.11)	2 years and 4 months	2.3333 years
Accumulated Depreciation	(90,000 × 5% × 2.3333)	10,500

Example-7

Mr. Ghafoor has provided following data:

	Cost 1.1.2012	Accumulated Depreciation 1.1.2012
Building A/c	800,000	250,000

(1) A building costing Rs. 135,000 on 1.4.2009 is exchanged with a new building costing Rs. 400,000 and Rs. 320,000 is paid to settle the transaction. Transaction took place on 30.4.2012.

(2) A building costing Rs. 35,000 is purchased on 1.Dec.2012.

Required:

Prepare Asset a/c, accumulated depreciation a/c and disposal a/c for the year ended December 31, 2012? Depreciation rate is 10% W.D.V

Answer-7

Dr. Building a/c Cr.

1.1.12	b/d	800,000	30.4.12	Disposal	135,000
30.4.12	Disposal	400,000			
1.12.12	Cash	35,000			
			31.12.12	c/d	1,100,000

Dr. Accumulated Depreciation a/c Cr.

Disposals (W-2)	37,224	b/d	250,000
		Depreciation Exp. (W-1)	75,216
c/d	287,992		

Dr. Disposal a/c Cr.

Building	135,000	Building	400,000
Cash	320,000	Accumulated Depreciation (W-2)	37,224
		Profit & Loss (Bal.)	17,776

(W-1) Depreciation Expense

- On opening assets excluding disposals			
WDV of opening assets as on 01.01.12 (800,000 – 250,000)	550,000		
Less: WDV of disposal on 01.01.01 (W-2)	(101,148)		
	448,852	x10%	44,885
- Additions (400,000 × 10% × 8/12)	26,667		

	(35,000 × 10% × 1/12)		292	26,959
-	Disposals	(W-2)		3,372
	Total			75,216

(W-2) Accumulated Depreciation of Disposals

Cost	(1.4.09)		135,000
Dep. Exp.	(31.12.09)	(135,000 × 10% × 9/12)	(10,125)
WDV at	(31.12.09)		124,875
Dep. Exp.	(31.12.10)	124,875 × 10%)	(12,488)
WDV at	(31.12.10)		112,387
Dep. Exp.	(31.12.11)	(112,387 × 10%)	(11,239)
WDV at	(31.12.11)		101,148
Dep. Exp.	(31.12.12)	(101,148 × 10% × 4/12)	(3,372)
WDV	(30.04.12)		97,776

Accumulated Depreciation on Disposals (135,000 – 97,776) 37,224

Journal entry

	Dr.	Cr.
Building (New)	400,000	
Accumulated Depreciation (W-2)	37,224	
Profit & Loss (Bal.)	17,776	
Building (old)		135,000
Cash		320,000

Note:

1. Sometimes cash paid to settle the transaction will not be given in the question rather you will be provided with trade-in-allowance. Trade-in-allowance is the value assigned by the shopkeeper to our old asset. In such case cash paid can be calculated through following equation:

Cash paid = Cost of new asset - Trade in allowance

2. Gain/ (loss) on exchange of asset can be calculated through shortcut way as follows:

Gain/ (loss) = Trade in allowance - Book value of asset disposed off

Cost of exchanged asset in certain circumstances

Sometimes the fair market value of new asset is not known in the exchange transaction, in this case cost of new asset will be calculated in the following way.

Scenario	Cost of new asset to be debited in exchange entry
Only fair value of new asset is given	Fair value of new asset
Fair value of new asset is not given but fair value of old asset is given	Fair value of old asset + cash paid Fair value of old asset – cash received
Fair value of old assets and fair value of new assets both known	Fair value of old asset + cash paid Fair value of old asset – cash received
Fair value of both new asset and old asset is not given/ Transaction lack commercial substance	Book value of old asset + cash paid Book value of old asset – cash received

Transaction lack commercial substance means that future cash flows from new asset change minimally.

Example

Mr. Umair has exchanged an asset with a new one. The cost of old asset and its accumulated depreciation on date of disposal is Rs.40,000 and Rs.13,000 respectively. Cash paid to settle the transactions was Rs.18,000.

Required:

Pass journal entries under 3 independent scenarios.

(1) Fair market value of new asset is Rs. 50,000.

(2) Fair market value of new asset is not known and fair market value of old asset is Rs. 25,000.

(3) Fair market value of old and new asset is not known.

Solution

(1)

	Dr.	Cr.
Asset (new)	50,000	
Accumulated Depreciation	13,000	
P/L (Bal.)		5,000
Asset (old)		40,000
Cash		18,000

(2)

	Dr.	Cr.
Asset (new) (25,000 + 18,000)	43,000	
Accumulated Depreciation	13,000	
P/L (Bal.)	2,000	
Asset (old)		40,000
Cash		18,000

(3)

	Dr.	Cr.
Asset (new) (27,000 + 18,000)	45,000	
Accumulated Depreciation	13,000	
Asset (old)		40,000
Cash		18,000

LO8: PREPARING FIXED ASSET ACCOUNT AT BOOK VALUE

Under this method, depreciation is directly charged to an Asset Account by debiting Depreciation Account and crediting the Asset Account. At the end of the accounting period, depreciation Account is closed by transferring it to the Profit and Loss Account. In the Balance Sheet, the asset appears at its written down value (cost less depreciation provided to-date). Here, actual cost of an asset and the total amount of depreciation that has been provided (to-date) cannot be ascertained from the Balance Sheet.

		Entry	Dr.	Cr.
4.	Recording depreciation expense when asset a/c is prepared at book value	Depreciation expense a/c Asset a/c – at book value	XXX	XXX
		Entry	**Dr.**	**Cr.**
5.	Entry for disposal of asset when asset a/c is prepared at book value	Cash P/L a/c (balancing) Asset a/c – at book value (In case there is loss on disposal)	XXX XXX	XXX

		Entry	Dr.	Cr.
6.	Entry on exchange of asset when asset a/c is prepared at book value	Asset a/c – at book value (cost of new asset) P/L a/c (balancing) Asset a/c – at WDV (WDV of old asset) Cash (In case there is loss on disposal)	xxx xxx	 xxx xxx

Example-1

Mr. Umer has provided the following data.

	1.1.2008
Furniture – book value	700,000

(1) During the year on 1. April, 2008 a additions of Rs. 80,000 took place.
(2) On 30.06.08 an asset costing Rs. 120,000 on 1.7.06 is disposed off for Rs. 25,000 only.
(3) Method of depreciation is diminishing balance method and rate is 10%.

Required:

Calculate depreciation expense and prepare asset a/c and disposal a/c for year ended 31.12.08.

Answer

Dr. Furniture a/c – at book value Cr.

1.1.08	b/d	700,000	30.06.08	Disposal	97,470
1.4.08	Cash	80,000	31.12.08	Depreciation	70,870
			31.12.08	c/d	611,600

Dr. Disposal A/c Cr.

Furniture – BV	97,470	Cash	25,000
		P/L (Bal.)	72,470

(W-1) Depreciation Expense

- On opening assets excluding disposals	(700,000 – 102,600) × 10%	59,740
- On additions	(80,000 × 10% × 9/12)	6,000
- On disposals	(W-2)	5,130
		70,870

(W-2) Book value of Disposals

Cost	(1.7.06)		120,000
Depreciation	(31.12.06)	(120,000 × 10% × 6/12)	(6,000)
WDV	(31.12.06)		114,000
Depreciation	(31.12.07)	(114,000 × 10%)	(11,400)
WDV	(31.12.07)		102,600
Depreciation	(30.06.08)	(102,600 × 10% × 6/12)	(5,130)
WDV	(30.06.08)		97,470

Disposal entry

Cash		
P/L (Bal.)		
Furniture – BV	25,000 72,470	97,470

Example-2

Mr. Atif has provided the following data.

	1.1.2013
Building – book value	500,000

(1) On 1 October, 2013 a new building was purchased costing Rs. 60,000.
(2) On 31.3.13 an old building costing Rs. 90,000 on 1.1.11 is disposed off for Rs. 60,000.
(3) ON 30.06.13 another building having book value of Rs. 50,000 on 1.1.13 is disposed off for Rs. 4,200 only.
(4) Rate of depreciation is 15% WDV method.

Required:
Relevant a/c for year ended 31.12.13.

Answer

Dr.		Building a/c – at book value			Cr.
1.1.13	b/d	500,000	31.3.13	Disposal	62,587
1.1.13	Cash	60,000	30.06.13	Disposal	46,250
			31.12.13	Depreciation	66,184
			31.12.13	c/d (Bal.)	384,979

Dr.	Disposal A/c		Cr.
Building – BV	62,587	Cash	60,000
Building – BV	46,250	Cash	4,200
		P/L (Bal.)	44,637

(W-1) Depreciation Expense

- On opening assets excluding disposals (500,000 – 65,025 – 50,000) × 15%	57,746
- On additions (60,000 × 15% × 3/12)	2,250
- On disposals (2,438 + 3,750)	6,188
	66,184

(W-2) Book value of Disposal in point 2

Cost	(1.1.11)		90,000
Depreciation	(31.12.11)	(90,000 × 15%)	(13,500)
WDV	(31.12.12)		76,500
Depreciation	(31.12.12)	(76,500 × 15%)	(11,475)
WDV	(31.12.12)		65,025
Depreciation	(31.03.13)	(65,025 × 15% 3/12)	(2,438)
WDV	(31.03.13)		62,587

(W-3) Book value of Disposals in point 3

Book value	(1.113)		50,000
Depreciation	(30.06.13)	(50,000 × 15% 6/12)	(3,750)
WDV	(30.06.13)		46,250

LO9: REVALUATION OF PROPERTY PLANT AND EQUIPMENT

Measurement after initial recognition

Two measurement models after acquisition of non-current asset are as follows:

(1) ***Cost model***

After recognition as an asset, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.

(2) ***Revaluation model***

After recognition of an asset, an item of property, plant and equipment whose fair value can be measured reliably shall be carried at a revalued amount which is its fair value at the date of the revaluation less any subsequent accumulated depreciation and accumulated impairment losses.

The fair value of land and buildings is usually determined from market-based evidence by appraisal that is normally undertaken by professionally qualified valuers.

If an item is revalued, the entire class of assets to which that asset belongs should be revalued.

Revalued assets are depreciated in the same way as under the cost model.

Frequency of revaluation

Under the revaluation model, revaluations should be carried out regularly, so that the carrying amount of an asset does not differ materially from its fair value at the balance sheet date.

Accounting treatment of revaluation increase/decrease

Change in Carrying Amount	Initial	Subsequent
Increase	Included in Other comprehensive income (heading "Revalution surplus")	Included in OCI and increases revaluation surplus unless it reverses a revaluation decrease of the same asset previously recognized in profit or loss.
Decrease	Debited to Profit or loss	Debited to profit or loss unless any credit balance exists in the revaluation surplus

Accounting treatment of accumulated depreciation a/c at the time of revaluation

It is eliminated against the gross carrying amount of the asset and the net amount is restated to the asset's revalued amount.

Treatment of Revaluation surplus

Transfer revaluation surplus on yearly basis to retained earnings (it will be the difference between depreciation based on the revalued carrying amount and depreciation based on original cost).

Treatment of Revaluation surplus on disposal of asset

Transfer full amount appearing in balance sheet to retained earnings

LO10: DISCLOSURES / NOTE

The financial statements shall disclose, for each class of property, plant and equipment:

(a) The measurement bases used (i.e. cost model or revaluation model); (Narrate)

(b) The depreciation methods used; (Narrate)

(c) The useful lives or the depreciation rates used; (Narrate)

(d) The gross carrying amount and the accumulated depreciation at the beginning and end of the period; and (Table)

(e) A reconciliation of the carrying amount at the beginning and end of the period showing:

- *(i) Additions;*
- *(ii) Acquisitions through business combinations; (Detail in CA Final)*
- *(iii) Increases or decreases resulting from revaluations*
- *(iv) Impairment losses*
- *(v) Disposals;*
- *(vi) Depreciation;*

The financial statements must also disclose:

- *the existence and amounts of restrictions on title, and property, plant and equipment pledged as security for liabilities; (Narrate)*
- *the amount of expenditures recognised in the carrying amount in the course of construction;*
- *the amount of contractual commitments for the acquisition of property, plant and equipment;*
- *if it is not disclosed separately in the statement of comprehensive income, the amount of compensation from third parties for items of property, plant and equipment that were impaired, lost or given up that is included in profit or loss. and*

Disclosures for assets stated at revalued amounts

When items of property, plant and equipment are stated at revalued amounts following must be disclosed:

- *the effective date of the revaluation;*
- *whether an independent valuer was involved;*
- *the extent to which the items' fair values were determined directly by reference to observable prices in an active market or recent market transactions on arm's length terms or were estimated using other valuation techniques*
- *for each revalued class of property, plant and equipment, the carrying amount that would have been recognized had the assets been carried under the cost model; and*
- *the revaluation surplus, indicating the change for the period and any restrictions on the distribution of the balance to shareholders.*

Additional disclosures encouraged by IAS 16

IAS 16 encourages disclosure of the following information as users of financial statements might find it to be useful. not naming

- *the carrying amount of temporarily idle property, plant and equipment;*
- *the gross carrying amount of any fully depreciated property, plant and equipment that is still in use;*
- *the carrying amount of property, plant and equipment retired from active use and held for disposal; and*
- *when the cost model is used, the fair value of property, plant and equipment when this is materially different from the carrying amount.*

LO11: ALTERNATE NAMES FOR DIFFERENT TERMINOLOGIES

Main Name	Alternate names
Residual value	Scrap value, Salvage value
Diminishing balance method	Written down value method/ Book value method/ Carrying amount method/ Net book value Method/ Declining balance method/ Reducing balance method.
Output method	Number of Units produced method/Units of production method/ Machine Hours method/ Service hours method/ Usage method/ Mileage method
Trade-in-allowance	Exchange allowance

PRACTICE QUESTIONS

Question-1

Mr. Baber provided you with following information:

	Cost as on 1.1.2009	Accumulated Depreciation as on 1.1.2009	Rate S.L
Machinery	600,000	250,000	10%
Vehicle	700,000	90,000	20%

Following are the additions made during the year:

	Date of Purchase	Cost
Machinery	1.3.2009	90,000
Vehicle	1.5.2009	80,000
Vehicle	1.6.2009	100,000

Required:

Prepare machinery A/C and vehicle A/C (cost and accumulated depreciation) for December 31, 2009 and December 31, 2010. **(6)**

Question-2

Mr. Ali has informed you that following balances are appearing on 1.1.2013 in his books of accounts:

	Cost	Accumulated Depreciation
Machinery a/c	600,000	300,000

Following is the detail of additions during the year ended December 31, 2013:

	Date of Purchase	Cost
Cutter machine	1.3.2013	500,000
Molding machine	1.8.2013	250,000

Method for depreciation is WDV and rate is 20%.

Required:

Prepare relevant accounts for year ended December 31, 2013. **(6)**

Question-3

Mr. A has purchased a machine costing Rs. 100,000 on 1.1.2004. Residual value is Rs. 2,000.

Total life in units	10,000
Units produced in 2004	2,000
Units produced in 2005	3,000
Units produced in 2006	5,000

Calculate depreciation for each year ending at 31 December under the output method. **(3)**

Question-4

Mr. B provided the following data:

Cost of machine	300,000
Date of purchase	1.1.2003
Useful life	4 years
Residual value	50,000

Calculate depreciation for each year ending at 31 December under year digit method. **(3)**

Question-5

The following detail is provided by Mr. Aamir on 1.1.2007

	Cost as on 01.01.07	Accumulated Depreciation as on 01.01.07
Vehicle	1,400,000	650,000

Rate of depreciation is 15% on straight line basis
Following is the further detail for year ended December 31, 2007

Additions

Date of Purchase	Cost
1.Mar.07	200,000
1.May.07	250,000
1.June.07	23,000

Disposals

Description	Date of Purchase	Date of Disposal	Cost	Sale proceeds
Vehicle – 1	1.July.05	31.Mar.07	40,000	2,300
Vehicle – 2	1.March.04	30.June.07	70,000	4,700
Vehicle – 3	1.Aug.06	30.Nov.07	90,000	6,600

Required:
Prepare relevant accounts for year ended December 31, 2007. **(8)**

Question-6

Mr. Umer has provided the following data for the year ended Dec. 31, 2008.

	Cost 1.1.08	Accumulated Depreciation
Assets	1,400,000	840,000

During the year an asset costing Rs. 370,000 on 1.1.06 is destroyed by fire on 31.5.2008.
Method of depreciation is 10% straight line.

Required:
Prepare relevant accounts and pass the entry for disposal **(4)**

Question-7

Mr. Ali has informed you that following balances are appearing on 1.1.2008 in his books of accounts:

	Cost	Accumulated Depreciation
Vehicles	600,000	200,000

Following is the detail of addition during the year ended December 31, 2008:

	Date of Purchase	Cost
Vehicle 9	1.3.2008	50,000

Cost balance of Rs. 600,000 appearing on 1.1.2008 includes following two assets:

	Date of Purchase	Cost
Vehicle 1	1.4.2003	20,000
Vehicle 2	1.3.2004	30,000

Vehicle 5 which was purchased on 1.1.2006 is sold on 31.5.2008. Its cost was Rs. 40,000.

Required:
Using straight line method, calculate depreciation expense for year ended December 31, 2008. Rate of depreciation is 20% per annum. Also prepare asset a/c and accumulated depreciation a/c for year ended December 31, 2008. **(8)**

Question -8

Asif has provided you with following data:

	Cost as on 1.1.07	Accumulated Depreciation 1.1.07
Vehicle	600,000	345,000

Following is the breakup of above Assets:

Purchased on	1.7.02	150,000
Purchased on	1.1.04	250,000
Purchased on	1.7.05	200,000
		600,000

- Life of all assets is 5 years.
- Additions made during year ended amounted to Rs. 90,000 as on 1.Mar.07.
- An asset having cost of Rs. 70,000 on 1.7.05 is disposed of on 31.3.07 for Rs. 30,000.

Required:

(i) Prepare relevant accounts for year ended Dec. 31, 2007.
(ii) Calculate depreciation Expense for the year ended Dec. 31, 2007. **(8)**

Question-9

Arslan has provided you the following data:

	Cost as on 1.1.09	Accumulated Depreciation 1.1.09
Vehicle	700,000	350,000

- Rate of Depreciation is 20% p.a. on S.L basis.
- Above assets include assets purchased on 1.4.04 costing Rs. 200,000.
- Remaining were purchased in 2008.

Additions

Date	Cost
1.4.09	200,000
1.7.09	300,000
1.7.10	250,000

Disposals

Cost	Date of purchase	Date of Sale
30,000	01.03.08	30.6.09

Required:
Calculate depreciation for year ended Dec. 31, 2009 and Dec. 31, 2010 **(8)**

Question-10

Mr. Sannan has provided you with following information:

	Cost	Accumulated Depreciation
	1.1.07	1.1.07
Building	2,300,000	800,000

(i) Detail of addition for year ended Dec. 31, 2007

On February 01, 2007	400,000
On April 01, 2007	650,000

(ii) Details of Disposal for year ended Dec. 31, 2007

Date of sale	Date of Purchase	Cost	Sale proceeds
31.08.07	1.1.04	550,000	450,000
31.05.07	1.9.05	700,000	300,000

(iii) Depreciation rate is 10% on diminishing balance method.

Required:

Prepare relevant accounts for the year ended December 31, 2007? (8)

Question-11

Mr. Saad has provided you with following information:

	Cost as on	Accumulated Depreciation	Rate
	1.1.2012	as on 1.1.2012	S.L
Plant and Machinery	600,000	200,000	20%

Following is the addition made for year ended December 31, 2012.

	Date	Cost
Plant and Machinery	1.2.2012	70,000

During the year a plant purchased on 1.7.2009 having book value of Rs. 15,000 is sold on 31.3.2012 for Rs. 15,800.

Required:

Prepare relevant accounts for year ended December 31, 2012 only. (6)

Question-12

Mr. Umer has provided you with following information:

	Cost as on	Accumulated Depreciation	Rate
	1.1.2012	as on 1.1.2012	W.D.V
Plant and Machinery	500,000	150,000	20%

Following is the addition made for year ended December 31, 2012.

	Date	Cost
Plant and Machinery	1.2.2012	77,000

During the year a plant purchased on 1.8.2009 having book value of Rs. 12,000 is sold on 31.3.2012 for Rs. 16,300.

Required:

Prepare relevant accounts for year ended December 31, 2012 only. (6)

Question-13

Mr. Aamir purchased an asset on 1.1.2012 with a life of 10 years. Its cost is Rs. 50,000 and residual value is Rs. 5,000. On 1.1.2014 he decided to change the life to a total of 4 years and a new residual value of Rs. 2,000. Year end is December 31 and method is straight line.

Required:

Calculate depreciation expense for 2012, 2013, 2014 and 2015. (4)

Question-14

Mr. Inzamam-ul-Haq has purchased an asset on 1.1.2008 for Rs. 70,000 whose residual value is Rs.10,000 at the end of useful life of six years. On 1.1.2010 he decided to change the method to WDV using rate of 33.12%.

Required:

Calculate depreciation expense for the first 6 years of asset's life? (4)

Question -15

Mr. Inam has purchased an asset on 1.1.2007 for Rs. 80,000 whose residual value is Rs. 10,000 and rate of depreciation is 10% WDV. On 1.1.2009 it is decided to change the method to straight line with a remaining life of 5 years and new residual value of Rs. 5,000.

Required:

Calculate depreciation expense for first 4 years. (3)

Question-16

Mr. Omer purchased a plant costing Rs. 50,000 on 1.Jan.2009. Its expected useful life is 10 years with a residual value of Rs. 6,000. At start of year 2011 company decided to change the life to 7 years in total and having a residual value of Rs. 2,000 at the end of life.

Method used is S.L.

Required:

Calculate depreciation expense for year 2009, 2010, 2011 and 2012. Year end is December 31. (4)

Question-17

Mr. Musa purchased a furniture costing Rs. 200,000 on 1.1.2011. Rate of Depreciation decided by company is 20% using WDV method. The residual value estimated on 1.1.2011 is Rs. 10,000.

The company decided on 1.1.2013 that depreciation method should be S.L with a residual value of Rs.6,000 at the end of its remaining useful life of 4 years.

Required:

Calculate depreciation expense for 2011, 2012, 2013 and 2014. Year end is 31 December. (4)

Question-18

Mr. Urva purchased a vehicle costing Rs. 700,000 on 1.1.2012. Initially its life was expected to be 7 years with a residual value of nil using straight line method. On 1.1.2015 it is decided that total life of asset will end on 31.12.2016 with a residual value of Rs.15,000

Required:

(a) Calculate depreciation expense for 2012, 2013, 2014, 2015, 2016. Year end is December 31.

(b) Also calculate WDV on 31.12.2016. (4)

Question-19

A vehicle bought on 1 January 20X0 at a cost of Rs. 16,000. Its useful economic life is estimated at 4 years and its trade-in value at that point is estimated as being Rs. 4,000.

During 20X2 a review of the vehicle's probable useful economic life suggested that it should be retained until 1 January 20X5 and its residual value should be Rs. 2,500.

Required:
What is the amount of straight line depreciation charged in the profit and loss account in the year to 31 December 20X2 and the amount included in the balance sheet for accumulated depreciation at that date? (4)

Question-20

Mr. Asad has provided you following data:

	Cost on 1.1.2012	Accumulated Depreciation on 1.1.2012
Plant and Machinery	600,000	200,000

Following transaction took place during the year ended 31.12.2012

- A plant costing Rs. 80,000 purchased on 1.4.2009 is exchanged with a new plant on 30.6.2012. The cost of new plant is Rs. 130,000 and TIA of Rs. 17,000 is agreed and remaining amount is paid in cash.
- Further additions amounting to Rs. 67,000 are made on 1.Sep.2012

Method used is S.L @ 10%.

Required:

a. Pass the journal entry for exchange.
b. Prepare relevant accounts for year ended December 31, 2012. (8)

Question-21

Mr. Nasir has disclosed the following data:

	1.1.2009
Furniture – book value	25,000

Following transactions took place during the year ended December 31, 2009.

Additions	Cost	Date of purchase
	60,000	1.3.2009
	90,000	1.6.2009

Disposals			
Sale proceeds	Cost	Date of Purchase	Date of Disposal
12,000	30,000	1.4.2007	30.9.2009

Required: (5)
Prepare asset A/C and disposal A/C. Rate of depreciation is 20% W.D.V

Question-22

Mr. Sannan has provided you with following information:

	Book value 1.1.07
Building	1,500,000

(i) Detail of addition for year ended Dec. 31, 2007

On February 01, 2007	400,000
On April 01, 2007	650,000

(ii) Details of Disposal for year ended Dec. 31, 2007

Date of sale	Date of Purchase	Cost	Sale proceeds
31.08.07	1.1.04	550,000	450,000
31.05.07	1.9.05	700,000	300,000

(iii) Depreciation rate is 10% on diminishing balance method. (4)
Prepare relevant accounts for the year ended December 31, 2007.

Question -23

Mr. Waqar Younis has provided following data:

	1.1.2010
Furniture – Book value	35,000

Following transactions took place during the year.

(1) Additions of Rs. 12,000 took place on 1.3.2010.
(2) During the year an old asset having book value of Rs. 7,000 on 1.1.2010 is exchanged with a new asset costing Rs. 20,000. The exchange transaction took place on 31.3.2010. Cash paid was Rs.7,500.
(3) Rate of depreciation is 15% W.D.V.

Required:

Prepare relevant accounts at book value (6)

Question -24

Following is the detail of fixed assets as on 1.1.2007 for MJE.

Description	Method	Cost	Accumulated Depreciation
Furniture	S.L 10% with R.V of 5 % of cost.	100,000	?
Computer	WDV 5%	200,000	?
Vehicle	WDV 10%	300,000	80,000

(i) 70% of furniture was bought on 1.3.2003 and 30% on 1.4.93. Furniture having book value of Rs. 5,000 purchased on 1.3.03 was sold on 30.9.2007 at a gain of Rs. 6,000.
(ii) All computers were purchased on 1.4.04. w.e.f 1.1.2007 it is decided to change the method of depreciation for computer to S.L with remaining life of 3 years and residual value of Rs. 3,000.
(iii) A vehicle costing Rs. 20,000 purchased on 1.7.2005 was traded in with a new vehicle on 1.4.2007 by paying Rs. 9,000 and loss on transaction was Rs. 4,000.
(iv) A vehicle having book value of Rs. 5,000 purchased on 1.3.03 was sold on 30.11.2007 for Rs. 2,000.
(v) On October 1, 2007 MJE transferred to its factory a vehicle which had been included in its trading stock and which bore a price label of Rs. 18,000 in the showroom. MJE makes a gross profit of 40% of cost, on sale of such assets.

Required:

1. Prepare asset accounts on December 31, 2007.
2. Prepare accumulated depreciation accounts on December 31, 2007.
3. Calculate gain/(loss) on December 31, 2007. (25)

Question-25

Following account balances are appearing in the books of Amjad as on

	Cost 31.12.2010	Accumulated Depreciation 31.12.2010
Furniture	800,000	302,000
Plant and Machinery	300,000	70,000

Following errors were identified by the auditors for the year ended December 31, 2010.

(i) Advance paid for purchase of furniture to be delivered on 31.3.2011 is debited to furniture account on 1.7.2010. Amount is Rs. 30,000.
(ii) Asset (furniture) costing Rs. 70,000 purchased on 1.4.2008 is exchanged with new furniture costing Rs. 100,000 on 31.3.2010. Cash of Rs. 12,000 is paid to settle the transaction. The accountant has ignored the exchange transaction and has debited Rs. 12,000 to asset account against cash paid.

(iii) Plant and machinery costing Rs. 80,000 purchased on 1.4.2009 was sold on 30.9.2010 for Rs. 33,000 and sale proceeds were credited to plant and machinery A/C.

Rate of Depreciation for both assets is 10% S.L.

Required:

(a) Prepare the journal entries to correct the above errors.

(b) Prepare adjusted Plant and Machinery A/C

Note: Ignore depreciation adjustments for the year while passing journal entries. **(10)**

Question-26

A company acquired a land for Rs. 600,000 on January 1, 2009. For land the revaluation model is used. The value of land on respective dates is as follows:

	Rs.
December 31, 2009	750,000
December 31, 2010	580,000
December 31, 2011	650,000
December 31, 2012	800,000

Required:

Prepare the journal entries and land account from year ended December 31, 2009 to December 31, 2012.**(4)**

(Prepare relevant ledger)

Question-27

ABC Company acquired land for Rs. 700,000 on Jan. 1, 2005. The company uses revaluation model for valuation of its assets. The value of land on respective dates is as follows:

Revaluation date	Revalued amount
Dec. 31, 2005	800,000
Dec. 31, 2006	680,000
Dec. 31, 2007	750,000
Dec. 31, 2008	825,000

Required:

Prepare journal entries and also prepare Land account from year ended December 31, 2005 to December 31, 2008. **(4)**

(Prepare relevant ledger)

Question-28

Cost of plant at 1/1/20X1:	100,000
Depreciation:	10% per annum to a nil residual value
1/1/20X2	180,000
1/1/20X3	60,000
1/1/20X4	77,000
1/1/20X5	120,000

The company's policy is to transfer the realised portion of the revaluation surplus to retained earnings as the asset is used.

Required:

Show the journal entries and ledger accounts for each of the years ended 31 December 20X1 to 20X5 **(14)**

(Prepare relevant ledger)

Question-29

A company acquired a building for Rs. 500,000 on January 1, 2010. The building is depreciated over its useful life of 20 years. For building the revaluation model is used. The value of building on respective dates is as follows:

Revaluation date	Fair value in Rs.
January 1, 2011	550,000
January 1, 2012	380,000
January 1, 2013	750,000
January 1, 2014	800,000

Required:

Show the journal entries and ledger accounts for each of the years ended 31 December 2010 to 2014.1**(14)**
(Prepare relevant ledger)

Question-30

Cost of plant at 1/1/2001: 200,000
Depreciation: **10 years to a nil residual value**

Details of revaluation performed by an independent valuer are as follows:

Date	Fair Value
31/12/2002	280,000
31/12/2003	80,000
31/12/2004	60,000
31/12/2005	120,000

The company's policy is to transfer the realised portion of the revaluation surplus to retained earnings as the asset is used.

Required:

Prepare journal entries to record the above transactions from the date of acquisition of the plant to the year ended 31 December 2005. **(Prepare relevant ledger)** **(10)**

Question-31

Mian Limited acquired a plant for Rs. 100 million on July 1, 2015. The following information relating to the plant is available:

(i) It is being depreciated on the straight line basis, over 10 years.

(ii) ML uses the revaluation model for subsequent measurement of its property, plant and equipment and accounts for revaluations on the net replacement value method. The details of revaluation carried out by the independent values during the past years are as follows:

Revaluation date	Fair value (Rs. In 'million')
June 30, 2016	80
June 30, 2017	95
June 30, 2018	110

(iii) ML transfers the maximum possible amount from the revaluation surplus to retained earnings on an annual basis.

(iv) There is no change in the useful life of the building.

Required:

Prepare the journal entries to record the above transactions form the date of acquisition of the Plant to the year ended June 30, 2018. **(Prepare relevant ledger)** **(10)**

Question-32

Alvi Limited purchased a plant for Rs. 500,000 on 1 July 2010. The plant has an estimated useful life of 20 years and no residual value.

AL uses revaluation model for subsequent measurement of its property, plant and equipment and accounts for revaluations on net replacement value method. The details of revaluations performed by an independent firm of valuers are as follows:

Revaluation date	Fair value
1 July 2011	Rs. 480,000
1 July 2012	Rs. 390,000
1 July 2013	Rs. 450,000

Required:

Prepare journal entries to record the above transactions from the date of acquisition of the plant to the year ended 30 June 2014. **(Prepare relevant ledger)** **(10)**

Question-33

Cost of plant at 1/1/2011: 600,000

Depreciation: **15 years to a nil residual value**

Details of revaluation performed by an independent valuer are as follows:

Date	Fair Value
31/12/2012	550,000
31/12/2015	100,000

The company's policy is to transfer the realised portion of the revaluation surplus to retained earnings as the asset is used.

Required:

Prepare journal entries to record the above transactions from the date of acquisition of the plant to the year ended 31 December 2015. **(Prepare relevant ledger)** **(10)**

Question-34

Moin purchased a plant for Rs.300 million on 1 January 2010. The plant has an estimated useful life of 10 years and no residual value.

Revaluation date	Fair value
1 January 2011	Rs.500 million

The plant is sold for Rs.750 million on March 31, 2011.

Required:

Prepare journal entries to record the above transactions.

Question-35

Abid Limited (AL) uses the revaluation model for subsequent measurement of its property, plant and equipment and has a policy of revaluing its assets on an annual basis using the net replacement value method.

The following information pertains to AL's buildings:

(i) Four similar buildings were acquired in same vicinity on 1 January 2012 at a cost of Rs.300 million. The useful life of the buildings on the date of acquisition was 20 years.

(ii) AL depreciates buildings on the straight line basis over their useful life.

(iii) The result of revaluations earned out during the last three years by Premier Valuation Service, an independent firm of valuers, are as follows:

Revaluation date	Fair value Rs. In million
1 January 2013	323
1 January 2014	252
1 January 2015	272

(iv) On 30 June 2015, one of the buildings was sold for Rs.80 million.

Required:

(a) **Prepare**
Building account and accumulated depreciation account for the year ended December 31, 2012, 2013, 2014 and 2015.

(b) Journal Entries.

Question-36

The following information pertains to Akhtar Limited (AL).

(1) AL purchased a plant for Rs. 400 million on January 01, 2016 and installed at the cost of Rs.34 million. The plant was acquired by obtaining a specific loan from Habib Bank Limited (HBL) for the plant of 400 million at a markup of 12%. The remaining amount was paid through running finance facility which carries markup at 12.5%. The specific loan is payable by December 31, 2019. AL had mortgaged the plant to obtain the specific loan.
The plant has an estimated useful life of 7 years with no residual value.
AL uses revaluation model for subsequent measurement of its plant and machinery and accounts for revaluations on net replacement value method. The details of revaluations performed by an independent firm of valuers "Ghaznavi & Co" are as follows:

Revaluation date	Fair value
30 December 2016	Rs. 360 million
30 December 2017	Rs. 320 million
30 December 2018	Rs. 220 million

On account of mishandling the plant during December 2018 the plant needs some repairs. The plant could be sold at its fair value as determined by valuer on 30 December 2018 after incurring some repair and selling cost of Rs. 15 million. If plant is not sold the following net cash inflows are expected from its use:

Year ended	Cash flows
December 31, 2019	90 million
December 31, 2020	70 million
December 31, 2021	65 million
December 31, 2022	30 million

The proper discount rate to be used for these cash flows is 10%. (Assume that the cash flows occur at the end of the year).

(2) To open a new factory premises near Multan, an expenditure of Rs. 30 million was spent of the construction of the factory on 1 June 2018, financed by a loan obtained from the bank at the rate of 12% per annum. The construction had not been completed at the end of the year.
Moreover, the directors also made a contract with M/s Shaheen Limited to purchase plant and machinery worth Rs. 100 million once the construction of factory building is completed.

(3) AL purchased buildings, costing Rs. 160 million on 1 July 2014. It is to be depreciated using the straight-line method, with Rs. 10 million residual value. On 31 December 2016 it has accumulated depreciation of Rs. 25 million . About 80% buildings are occupied by factory and remaining for admin purpose

On 1 January 2018, AL decided to change the depreciation method from straight line to reducing balance method. There is no change in life, however the estimate of residual value is Rs. 15

(4) AL purchased Cars for its administrative and selling departments, costing Rs. 30 million on Jan 11, 2015. On January 21, 2018 AL purchased Cars for Rs. 10 million. These are depreciated over 10 years using the straight-line method, with no residual value.

Required:

Prepare the disclosure under IAS 16 in relation to Property, Plant and Equipment in the notes to the published accounts for the year ended 31 December, 2018

(Comparatives are Required)

Note: you may round off your workings to the nearest millions.

PRACTICE SOLUTIONS

Answer-1

Machinery a/c

Dr.					Cr.
1.1.09	b/d	600,000			
1.3.09	Cash	90,000	31.12.09	c/d	690,000
1.1.10	b/d	690,000			
			31.12.10	c/d	690,000

Accumulated Dep. a/c (Machinery)

Dr.					Cr.
			1.1.09	b/d	250,000
31.12.09	c/d	317,500	31.12.09	Depreciation Exp	67,500
			1.1.10	b/d	317,500
31.12.10	c/d	386,500	31.12.10	Depreciation Exp	69,000

Depreciation Machinery – 2009

On opening assets	(600,000 × 10%)	60,000
On addition	(90,000 × 10% x 10/12)	7,500
		67,500

Depreciation Machinery – 2010

On opening assets	(690,000 × 10%)	69,000

Vehicle a/c

Dr.					Cr.
1.1.09	b/d	700,000			
1.5.09	Cash	80,000			
1.6.09	Cash	100,000	31.12.09	c/d	880,000
1.1.10	b/d	880,000	31.12.10	c/d	880,000

Accumulated Dep. a/c

Dr.					Cr.
			1.1.09	b/d	90,000
31.12.09	c/d	252,334	31.12.09	Depreciation Exp	162,334
			1.1.10	b/d	252,334
31.12.10	c/d	428,334	31.12.10	Depreciation Exp	176,000

Depreciation - 2009	On opening	(700,000 × 20%)	140,000
	On addition	(80,000 × 20% × 8/12) + (100,000 × 20% × 7/12)	22,334
			162,334
Depreciation - 2010	On opening	(880,000 × 20%)	176,000

Answer-2

Asset a/c

Dr.					Cr.
1.1.13	b/d	600,000			
1.3.13	Cash	500,000			
1.8.13	Cash	250,000	31.12.13	c/d	1,350,000

Accumulated Depreciation

Dr.					Cr.
			1.1.13	b/d	300,000
31.12.13	c/d	464,167		Depreciation expense	164,167

Calculation for Depreciation

- On opening assets	(600,000 – 300,000) × 20%	60,000
- On additions	(500,000 × 20% × 10/12) + (250,000 × 20% × 5/1/2)	104,167
		164,167

Answer-3

Calculation for Depreciation

Depreciation = $\frac{\text{(Cost – residual value)}}{\text{Total units}} \times$ No. of units produced in current year

Depreciation for 2004 = $\frac{(100,0000 - 2,000)}{10,000} \times 2,000$ = 19,600

Depreciation for 2005 = $\frac{(100,0000 - 2,000)}{10,000} \times 3,000$ = 29,400

Depreciation for 2006 = $\frac{(100,0000 - 2,000)}{10,000} \times 5,000$ = 49,000

Answer-4

Sum of digits = 4 + 3 + 2 + 1 = 10

Depreciation for 2003 = $\frac{(300,0000 - 50,000)}{10} \times 4$ = 100,000

Depreciation for 2004 = $\frac{(300,0000 - 50,000)}{10} \times 3$ = 75,000

Depreciation for 2003 = $\frac{(300,0000 - 50,000)}{10} \times 2$ = 50,000

Depreciation for 2003 = $\frac{(300,0000 - 50,000)}{10} \times 1$ = 25,000

Answer-5

Vehicle A/C

Dr.					Cr.
1.1.07	b/d	1,400,000			
1.3.07	Cash	200,000	31.3.07	Disposal	40,000
1.5.07	Cash	250,000	30.6.07	Disposal	70,000
1.6.07	Cash	23,000	30.11.07	Disposal	90,000
			31.12.07	c/d	1,673,000

Accumulated Dep. A/c

Dr.					Cr.
31.3.07	Disposal (W-2)	10,500	1.1.07	b/d	650,000
30.6.07	Disposal(W-2)	35,000			
30.11.07	Disposal(W-2)	18,000		Depreciation Exp (W-1)	251,138
31.12.07	c/d	837,638			

(W-1)Depreciation Expense

On opening excluding disposals	(1,400,000 – 40,000 – 70,000 – 90,000) × 15%	180,000
On additions	(200,000 × 15% × 10/12)+ (250,000 × 15% × 8/12) + (23,000 × 15% × 7/12)	52,013
On disposals	(40,000 × 15% × 3/12) +	

(70,000 × 15% × 6/12) + (90,000 × 15% × 11/12)	19,125
	251,138

(W-2) Accumulated Dep. Of Disposals

Disposal on 31.3.07	(1 year and 9 months)	(40,000 × 15% × 1.75)	10,500
Disposal on 30.6.07	(3 year and 4 months)	(70,000 × 15 % × 3.3333)	35,000
Disposal on 30.11.07	(1 year and 4 months)	(90,000 × 15% × 1.3333)	18,000
			63,500

Disposal A/C

Dr.		Cr.	
Vehicle	40,000	Accumulated Dep.	10,500
Vehicle	70,000	Accumulated Dep.	35,000
Vehicle	90,000	Accumulated Dep.	18,000
		Cash	2,300
		Cash	4,700
		Cash	6,600
		P/L (Bal.)	122,900

Answer-6

Asset a/c

Dr.			Cr.		
1.1.08	b/d	1,400,000	31.5.08	Disposal	370,000
			31.12.08	c/d	1,030,000

Accumulated Depreciation A/C

Dr.		Cr.		
Disposal (370,000 × 10% × 2.4167)	89,418	1.1.08	b/d	840,000
c/d	868,999		Depreciation (W-1)	118,417

Disposal A/c

Dr.		Cr.	
Cost	370,000	Acc. Depreciation	89,418
		P/L (bal.)	280,582

Disposal Entry

	Dr.	Cr.
Cash	0	
Accumulated Depreciation	89,418	
P/L (bal.)	280,582	
Asset a/c (cost)		370,000

(Asset destroyed by fire)

Calculation for Depreciation

- On opening assets excluding disposals	(1,400,000 – 370,000) x 10%	103,000
- On disposals	(370,000 × 10% × 5/12)	15,417
		118,417

Answer-7

Vehicle a/c

Dr.			Cr.		
1.1.08	b/d	600,000			
1.3.08	Cash	50,000	31.5.08	Disposal	40,000
			31.12.08	c/d	610,000

Accumulated Depreciation

Dr.			Cr.		
			1.1.03	b/d	200,000
31.5.08	Disposal (40,000 × 20% × 2.4167)	19,334		Depreciation expense	120,666
31.12.08	c/d	301,332			

Calculation of Depreciation:

On opening assets excluding disposals and fully depreciated	(600,000 – 20,000 – 40,000) × 20%	108,000
On additions	(50,000 × 20% × 10/12)	8,333
On fully depreciated assets	(20,000 × 20% × 3/12)	1,000
On disposals	(40,000 × 5/12 × 20%)	3,333
		120,666

Answer-8

Vehicle A/C

Dr.					Cr.
1.1.07	b/d	600,000	31.3.07	Disposal	70,000
1.3.07	Cash	90,000	31.12.07	c/d	620,000

Accumulated Depreciation A/c

Dr.					Cr.
31.3.07	Disposals (W-2)	24,500	1.1.07	b/d	345,000
				Depreciation Exp. (W-1)	109,500
31.12.10	c/d	430,000			

(W-1) Depreciation Expense

On opening assets excluding disposals and fully depreciated	(600,000 – 70,000 – 150,000) × 20%	76,000
On addition	(90,000 × 20% × 10/12)	15,000
On disposals	(70,000 × 20% 3/12)	3,500
On fully Depreciated	(150,000 × 20% × 6/12)	15,000
		109,500

(W-2)

Period in use	(1 year and 9 months)	
Accumulated Depreciation	(70,000 × 20% × 1.75)	24,500

Answer-9

		Rs.
Depreciation – 2009		
On opening assets excluding disposals excluding fully depreciated	(700,000 – 30,000 – 200,000) × 20%	94,000
On additions	(200,000 × 20% × 9/12 + 300,000 × 20% × 6/12)	60,000
On disposals	(30,000 × 20% × 6/12)	3,000
On fully depreciated	(200,000 × 20% 3/12)	10,000
		167,000
Depreciation – 2010		
On opening assets excluding disposals excluding fully depreciated.	(W-1) (1,170,000 – 200,000) × 20%	194,000
On additions	(250,000 × 20% 6/12)	25,000
Total		219,000

(W-1)

Asset a/c -2009

Dr.					Cr.
	b/d	700,000			
	Cash	200,000		Disposals	30,000
	Cash	300,000			
				c/d	1,170,000

Answer-10

Dr.		Building A/C			Cr.
1.1.07	b/d	2,300,000	31.5.07	Disposal	700,000
1.2.07	Cash	400,000	31.8.07	Disposal	550,000
1.4.07	Cash	650,000	31.12.07	c/d	2,100,000

Dr.		Accumulated Dep. a/c			Cr.
Disposal	(W-2)	175,780	b/d		800,000
Disposal	(W-2)	116,375	Depreciation Exp. (W-1)		186,527
c/d		694,372			

Dr.	Disposal a/c		Cr.
Building A/C	550,000	Accumulated Dep.	175,780
Building A/C	700,000	Accumulated Dep.	116,375
		Cash	450,000
		Cash	300,000
		P/L (Bal.)	207,845

(W-1) Depreciation Expense

			Rate	
On opening assets excluding disposal				
Opening WDV	(2,300,000 – 800,000)	1,500,000		
Less: WDV of Disposal as on 1.1.07 (W-2)	(400,950 + 609,000)	(1,009,950)		
		490,050	10%	49,00
On addition				
– (400,000 × 10% × 11/12)		36,667		
– (650,000 ×10% × 9/12)		48,750		85,41
On Disposal	(W-2)(26,730 + 25,375)			52,10
Total				186,52

(W-2) Accumulated Depreciation of Disposal

Disposal on 31 Aug 07		
Cost		550,000
Dep. (04)	(550,000 × 10%)	(55,000)
WDV (1.1.05)		495,000
Dep. (05)	(495,000 × 10%)	(49,500)
WDV (1.1.06)		445,500
Dep. (06)	(445,500 × 10%)	(44,550)
WDV (1.1.07)		400,950
Dep. (07)	(400,950 × 10% × 8/12)	(26,730)
WDV (as on 31.08.07)		374,220
Accumulated Depreciation	(550,000 – 374,220)	175,780
Disposal on 31 May 07		
Cost		700,000
Dep. (05)	(700,000 × 10% × 4/12)	(23,333)
WDV. (1.1.06)		676,667
Dep. (06)	(676,667 × 10%)	(67,667)
WDV (1.1.07)		609,000
Dep. (07)	(609,000 × 10% × 5/12)	(25,375)
WDV (as on 31.May.07)		583,625
Accumulated Depreciation	(700,000 – 583,625)	116,375

Answer-11

Dr.	Plant and machinery – At cost		Cr.
b/d	600,000	Disposal (W-1)	33,333
Cash	70,000	c/d	636,667

Dr.	Accumulated depreciation a/c		Cr.
Disposal (W-1)	18,333	b/d	200,000
c/d	309,500	Depreciation (W-2)	127,833

Dr.	Disposal Account		Cr.
Plant account	33,333	Accumulated depreciation	18,333
P/L	800	Cash	15,800

Workings

(W-1) Accumulated depreciation of disposals of machinery

Number of years the asset is used (1.7.2009 – 31.3.2012)		2 years and 9 months
Cost (in percentage)		100%
Accumulated depreciation (in percentage) (20% per year × 2.75Y)		55%
Book value at time of disposal (in percentage) (100% – 55%)		45%
Cost on 1.7.2009 (in rupees)	(15,000/45 × 100)	33,333
Accumulated depreciation on 30.03.2012 (in rupees)	(33,333 – 15,000)	18,333

(W-2) Depreciation

Depreciation - on opening assets excluding disposals		
Opening assets	600,000	
Disposals	(33,333)	
	566,667 × 20%	113,333
Depreciation – on additions	(70,000 × 20% × 11/12)	12,833
Depreciation – on disposals	(33,333 × 20% × 3/12)	1,667
		127,833

Answer –12

Dr.	Plant and machinery - At cost		Cr.
b/d	500,000	Disposal (W-1)	21,531
Cash	77,000	c/d	555,469

Dr.	Accumulated depreciation a/c		Cr.
Disposal (W-1)	9,531	b/d	150,000
c/d	272,692	Depreciation (W-2)	82,223

Dr.	Disposal Account		Cr.
Plant account	21,531	Accumulated depreciation	9,531
P/L	4,300	Cash	16,300

WORKINGS

(W-1) Accumulated depreciation of disposals

Assume cost to be 100		
Cost	(1.08.2009)	100
Depreciation (2009)	(100 × 20% × 5/12)	(8.3333)
WDV		91.6667
Depreciation (2010)	(91.6667 ×20%)	(18.3333)
WDV		73.3334
Depreciation (2011)	(73.3334 × 20%)	(14.6667)
WDV		58.6667
Depreciation (2012)	(58.6667 × 20% × 3/12)	(2.9333)
WDV (31.03.2012)		55.7334
Cost of disposals	(12,000 / 55.7334 × 100)	21,531
Accumulated depreciation of disposals	(21,531 – 12,000)	9,531

(W-2) Depreciation

Depreciation - on opening assets excluding disposals			
Opening assets WDV (500,000 – 150,000)		350,000	
Disposals WDV (21,531 / 100 × 58.6667)		(12,632)	
		337,368 × 20%	67,474
Depreciation - on additions	(77,000 × 20% × 11/12)		14,117
Depreciation - on disposals	(12,000 / 55.7334 × 2.9333)		632
			82,223

Answer-13

Depreciation 2012 $= \frac{\text{Cost – Residual value}}{\text{Life}} = \frac{50,000 - 5,000}{10} = 4,500$

2013 $= \frac{\text{Cost – Residual value}}{\text{Life}} = \frac{50,000 - 5,000}{10} = 4,500$

Depreciation 2014 $= \frac{\text{WDV – new residual value}}{\text{Remaining life}} = \frac{41,000 - 2,000}{2} = 19,500$

2015 $= \frac{\text{WDV – new residual value}}{\text{Remaining life}} = \frac{41,000 - 2,000}{2} = 19,500$

WDV at the time of change in estimate = 50,000 – 4,500 – 4,500

= 41,000

Answer-14

Depreciation 2008 $= \frac{\text{Cost – Residual value}}{\text{Life}} = \frac{70,000 - 10,000}{6} = 10,000$

2009 $= \frac{\text{Cost – Residual value}}{\text{Life}} = \frac{70,000 - 10,000}{6} = 10,000$

WDV of asset at the time of change in estimate = 70,000 – 10,000 – 10,000

= 50,000

Calculation of WDV

				Rs.
WDV		(1.1.2010)		50,000
Less:	Depreciation	(31.12.10)	(50,000 × 33.12 %)	(16,560)
WDV		(1.1.2011)		33,440
Less:	Depreciation	(31.12.11)	(33,440 × 33.12%)	(11,075)
WDV		(1.1.2012)		22,365

Less: Depreciation	(31.12.12)	(22,365 × 33.12%)		(7,407)
WDV	(1.1.2013)			14,958
Less: Depreciation	(31.12.13)	(14,958 × 33.12%)		(4,954)
WDV	(31.12.13)			10,004

Answer-15

Cost	(1.1.07)		80,000
Less: Depreciation	(31.12.07)	(80,000 × 10%)	(8,000)
WDV	(31.12.07)		72,000
Less: Depreciation	(31.12.08)	(72,000 × 10%)	(7,200)
WDV	(31.12.08)		64,800

Depreciation 2009 = $\frac{64,800 - 5,000}{5}$ = 11,960

Depreciation 2010 = $\frac{64,800 - 5,000}{5}$ = 11,960

Answer-16

Depreciation – 2009 = $\frac{\text{Cost} - \text{RV}}{\text{Life}}$ = $\frac{50,000 - 6,000}{10}$ = 4,400

Depreciation – 2010 = $\frac{\text{Cost} - \text{RV}}{\text{Life}}$ = $\frac{50,000 - 6,000}{10}$ = 4,400

Depreciation – 2011 = $\frac{\text{Book value} - \text{new residual value}}{\text{Remaining life}}$ = $\frac{41,200\ (\text{W-1}) - 2,000}{5}$ = 7,840

Depreciation – 2012 = $\frac{\text{Book value} - \text{new residual value}}{\text{Remaining life}}$ = $\frac{41,200 - 2,000}{5}$ = 7,840

(W-1) Book value at the time estimate is changed = 50,000 – 4,400 – 4,400
= 41,200

Answer-17

Cost			200,000
Depreciation	(31.12.2011)	(200,000 × 20%)	(40,000)
WDV	(31.12.2011)		160,000
Depreciation	(31.12.2012)	(160,000 × 20%)	(32,000)
WDV	(31.12.2012)		128,000

Depreciation – 2013 = $\frac{\text{Book value} - \text{new RV}}{\text{Remaining life}}$ = $\frac{128,000 - 6,000}{4}$ = 30,500

Depreciation – 2014 = $\frac{\text{Book value} - \text{new RV}}{\text{Remaining life}}$ = $\frac{128,000 - 6,000}{4}$ = 30,500

Answer-18

(a)

Depreciation expense

Depreciation – 2012 = $\frac{\text{Cost} - \text{RV}}{\text{Life}}$ = $\frac{700,000 - 0}{7}$ = 100,000

Depreciation – 2013 = $\frac{\text{Cost} - \text{RV}}{\text{Life}}$ = $\frac{700,000 - 0}{7}$ = 100,000

Depreciation – 2014 = $\frac{\text{Cost} - \text{RV}}{\text{Life}}$ = $\frac{700,000 - 0}{7}$ = 100,000

Depreciation – 2015 = $\frac{\text{Book value} - \text{new residual value}}{\text{Remaining life}}$ = $\frac{400,000\ (\text{W-1}) - 15,000}{2}$ = 192,500

Depreciation – 2016 = $\frac{\text{Book value} - \text{new residual value}}{}$ = $\frac{400,000 - 15,000}{}$ = 192,500

(W-1) WDV at time of change in estimate — Remaining life 2
= Cost – accumulated depreciation
= 700,000 – 100,000 – 100,000 – 100,000
= 400,000

(b)

WDV as on 31.12.2016

WDV = Cost – Accumulated Depreciation
= 700,000 – 100,000 – 100,000 – 100,000 – 192,500 – 192,500 = 15,000

Remember that WDV at the end of life will always be equal to RV.

Answer-19

Depreciation for the year ended December 31, 20X2	(W-2)	2,500
Accumulated depreciation as on December 31, 20X2		
Depreciation charged till December 31, 20X1	(W-1)	6,000
Depreciation, b/d	(W-2)	2,500
		8,500

(W-1) WDV of vehicle at the time of change in estimate i.e. 1.1.20X2

Cost	16,000
Less: Accumulated depreciation	
Number of period in use (1.1.20X0 – 31.12.20X1)	
Accumulated depreciation	(6,000)
WDV as on 1.2.20X2	10,000

(W-2) Calculation of depreciation for the year ended December 31, 20X2

Depreciation = (WDV at time of change - residual value) / remaining life
= ((W-1) 10,000 – 2,500)/ 3years = 2,500

The remaining life from 1.1.20X2 to 1.1.20X5 is three years

Answer-20

(a) Journal entry

Plant and Machinery	(New)		130,000	
Accumulated depreciation	(Old)	(W-1)	26,000	
P/L (Bal.)			37,000	
Plant and Machinery		(Old)		80,000
Cash A/C		(W-2)		113,000

(W-1) Accumulated Depreciation of Disposals

Period asset is used	(1.4.2009 – 30.6.2012)	3 years and 3 months
Accumulated Depreciation	(80,000 × 10% ×3.25)	26,000

(W-2) Cash paid

New asset cost – TIA = 130,000 – 17,000 = 113,000

(b)

Dr.		Plant and Machinery A/c		Cr.
b/d		600,000	Disposal (old)	80,000
Disposals	(New)	130,000		
Cash		67,000		
			c/d	717,000

Dr.	Accumulated Depreciation A/C		Cr.
Disposal (part-a)	26,000	b/d	200,000
		Depreciation Expense (W-1)	64,733
c/d	238,733		

Dr.	Disposal A/c		Cr.
Plant and Machinery (old)	80,000	Accumulated Depreciation	26,000
		Plant and Mach. (new)	130,000
Cash	113,000		
		P/L (Bal.)	37,000

(W-1) Depreciation Expense

- On opening assets excluding disposals (600,000 – 80,000) × 10%		52,000
- On additions	(130,000 × 10% × 6/12 + 67,000 × 10% × 4/12)	8,733
- On disposals	(80,000 × 10% × 6/12)	4,000
		64,733

Answer-21

Dr.		Furniture – Book value				Cr.
1.1.09	b/d	25,000	30.9.09	Disposals	(W-2)	17,340
1.3.09	Cash	60,000		Depreciation	(W-1)	24,480
1.6.09	Cash	90,000		c/d		133,180

Dr.	Disposal A/c			Cr.
Furniture – BV	17,340	Cash		12,000
		P/L	(bal.)	5,340

(W-1) Depreciation expense

- Opening excluding disposal (25,000 – 20,400) × 20%		920
- On addition	(60,000 × 20% × 10/12) + (90,000 × 20% × 7/12)	20,500
- On disposals		3,060
		24,480

(W-2) WDV of Disposals

Cost	(1.04.2007)		30,000
Depreciation	(2007)	(30,000 × 20% × 9/12)	(4,500)
WDV			25,500
Depreciation	(2008)	(25,500 × 20%)	(5,100)
WDV			20,400
Depreciation	(2009)	(20,400 × 20% × 9/12)	(3,060)
WDV			17,340

Answer-22

Dr.	Building – BV		Cr.
b/d	1,500,000	Disposals (BV) (W-2)	374,220
Cash	400,000	Disposals (BV) (W-2)	583,625
Cash	650,000	Depreciation Expense(W-1)	186,527
		c/d	1,405,628

Dr.		Disposal a/c		Cr.
Asset		374,220	Cash	450,000
Asset		583,625	Cash	300,000
			P/L (Bal.)	207,845

Workings

(W-1) Depreciation Expense

- On opening assets excluding disposals (1,500,000 – 400,950(W-2) – 609,000 (W-2)) × 10%		49,005
- On addition (400,000 × 10% × 11/12) + (650,000 × 10% × 9/12)		85,417
- On disposal (W-2) (26,730 + 25,375)		52,105
		186,527

(W-2) WDV of disposals

			Rs.
Disposal on 31.08.09			
Cost			550,000
Depreciation	(2004)	(550,000 × 10%)	(55,000)
WDV			495,000
Depreciation	(2005)	(495,000 × 10%)	(49,500)
WDV			445,500
Depreciation	(2006)	(445,000 × 10%)	(44,550)
WDV			400,950
Depreciation	(2007)	(400,950 × 10% × 8/12)	(26,730)
WDV	(31.08.07)		374,220
Disposed on 31.May.07			
Cost			700,000
Depreciation	(2005)	(700,000 × 10% × 4/12)	(23,333)
WDV			676,667
Depreciation	(2006)	(676,667 × 10%)	(67,667)
WDV			609,000
Depreciation	(2007)	(609,000 × 10% × 5/12)	(25,375)
WDV	(31.May.07)		583,625

Answer-23

Dr.		Building A/c – at BV			Cr.
1.1.2010	b/d	35,000	31.3.2010	Disposals (W-2)	6,737
31.3.2010	Disposals (new)	20,000		Depreciation (W-1)	8,213
1.3.2010	Cash	12,000	31.3.2010	c/d	52,050

Dr.		Disposal A/c		Cr.
Furniture	(old)	6,737	Furniture	20,000
Cash a/c		7,500		
P/L	(bal.)	5,763		

(W-1) Depreciation expense

- On opening excluding disposals	(35,000 – 7,000) × 15%	4,200
- On additions	(20,000 × 15% × 9/12)	2,250
	(12,000 × 15% × 10/12)	1,500
- On disposals (W-2)		263
		8,213

(W-2) WDV of disposals

WDV on 01.01.2010	7,000
Depreciation (7,000 × 15% × 3/12)	(263)
	6,737

Answer-24

Dr.	Furniture		Cr.
b/d	100,000	Disposal (W-2)	8,856
		c/d	91,144

Dr.	Furniture		Cr.
b/d	100,000	Disposal (W-2)	8,856
		c/d	91,144

Dr.	Accumulated Depreciation a/c		Cr.
		b/d (W-1)	53,992
Disposal (W-2)	3,856		
		Depreciation (W-3)	6,440
c/d (Bal.)	56,576		

(W-1) Opening accumulated depreciation:

70% furniture	$= \frac{70,000-(70,000\ x\ 0.05)}{10} \times 3.8333$	25,492
30 % furniture	$= \frac{30,000-(30,000\ x\ 0.05)}{10} \times 10$ years	28,500
		53,992

(W-2) Cost of Disposal and their Accumulated Depreciation:

Let Cost		100
Accumulated Depreciation	$= \left[\frac{100-5}{10} \times 4.5833\right]$	(43.5417)
WDV		56.4583
Cost in rupees	$= \frac{5,000}{56.4583} \times 100$	8,856
Accumulated Depreciation	(8,856 – 5,000)	3,856

Dr.	Disposal account		Cr.
Furniture (W-2)	8,856	Acc. Depreciation (W-2)	3,856
P and L	6,000	Cash (Bal.)	11,000

(W-3) Depreciation Expense:

- On opening cost less cost of Disposal less cost of fully depreciated assets:

Cost	(100,000 – 8,856 – 30,000)	61,144		
Less: Residual value	(61,144 × 5%)	(3,057)		
		58,087	x 10%	5,809

- On disposals $\frac{8,856-5\%\ of\ 8,856}{10} \times 9/12$ 631

6,440

Dr.	Computer account		Cr.
b/d	200,000	c/d	200,000

Dr.	Acc. Depreciation a/c		Cr.
		b/d (W-1)	26,269
		Depreciation (W-2)	56,910
c/d	83,179		

(W-1) Accumulated Depreciation:

			Rs.
Cost	(1.04.04)		200,000
Depreciation	(31.12.04)	(200,000 × 5% × 9/12)	(7,500)
WDV			192,500
Depreciation	(31.12.05)	(192,500 × 5%)	(9,625)
WDV			182,875
Depreciation	(31.12.06)	(182,875 × 5%)	(9,144)
W.D.V on 01.01.07			173,731
Accumulated Depreciation		(200,000 – 173,731)	26,269

(W-2)	Depreciation expense for the year using straight line	
	$= \frac{\text{WDV–New Residual Value}}{\text{remaining life}} = \frac{173{,}731-3{,}000}{3 \text{ years}}$	56,910

Dr.	Vehicle a/c		Cr.
b/d	300,000	Disposal (old) (iii)	20,000
Disposal (new) (W-1)	21,672	Disposal (iv) (W-3)	8,237
Purchases (18,000/140 × 100)	12,857	c/d (Bal.)	306,292

Dr.	Accumulated Depreciation		Cr.
		b/d	80,000
Disposal (iii) (W-2)	3,328		
Disposal (iv) (W-3)	3,237		
		Dep. Expense (W-4)	22,619
c/d	96,054		

Dr.	Disposal account		Cr.
Vehicle (old)	20,000	Vehicle (new)	21,673
		Acc. Depreciation (W-2)	3,328
Cash	9,000	P and L	4,000

Dr.	Disposal account		Cr.
Cost (W-3)	8,237	Acc. Depreciation (W-3)	3,237
		Cash	2,000
		P and L (Bal.)	3,000

Alternatively a combined disposal account can be prepared.

(W-1) Disposal Entry

	Dr.	Cr.
Vehicle (new) (Bal.)	21,673	
Acc. Depreciation (old)	3,327	
Profit and Loss	4,000	
Vehicle (old)		20,000
Cash a/c		9,000

(W-2)Accumulated Depreciation of Disposals (iii)

Cost			20,000
Depreciation	(2005)	(20,000 × 10% × 6/12)	(1,000)
WDV			19,000
Depreciation	(2006)	(19,000 × 10%)	(1,900)
WDV			17,100
Depreciation	(2007)	(17,100 × 10% × 3/12)	(428)
WDV			16,672
Accumulated Depreciation		(20,000 – 16,672)	3,328

(W-3) Cost and Accumulated Depreciation of Disposals (iv)

Let	Cost		100
	Dep. (2003)	(100 × 10% × 10/12)	(8.3333)
	WDV		91.6667
	Dep. (2004)	(91.6667 × 10%)	(9.1667)
	WDV		82.5
	Dep. (2005)	(82.5001 × 10%)	(8.25)
	WDV		74.25
	Dep. (2006)	(74.2501 × 10%)	(7.425)
	WDV		66.825
	Dep. (2007)	(66.825 × 10% × 11/12)	(6.1256)
	WDV		60.6994
	Cost	$= \frac{5,000}{60.6994} \times 100\%$	8,237
	Acc. Dep.	= 8,237 – 5,000	3,237

(W-4)Depreciation Expense:

- On opening WDV excluding disposals:

Op. WDV		(300,000 – 80,000)	220,000	
Less:	WDV of disposals:			
	- Adj. (iii)		(17,100)	
	- Adj. (iv)	$\left(\frac{8,237}{100} \times 66.825\right)$	(5,504)	
			197,396 x 10%	19,740

- On disposals
  - Adj. (iii) 428
  - Adj. (iv) $\frac{8,237}{100} \times 6.1256$ 505

- On additions (21,672 × 10% × 9/12 + 12,857 × 10% × 3/12) 1,946

22,619

Answer-25

Rectifying		Original		Wrong	
i) Advance – Furniture	30,000	Advance –Furniture	30,000	Furniture A/C	30,000
Furniture	30,000	Cash	30,000	Cash	30,000
ii) Furniture	18,000	Furniture	100,000	Furniture A/C	12,000
Acc. Dep.	14,000	Acc. Dep.(W-1)	14,000	Cash	12,000
P/L (Bal.)	32,000	P/L (Bal.)	32,000		
		Furniture	70,000		
		Cash	12,000		
iii) Acc. Dep.	12,000	Acc. Dep. (W-2)	12,000	Cash	33,000
P/L	35,000	Cash	33,000	Plant and Mach.	33,000
Plant and Mach.	47,000	P/L (Bal.)	35,000		
		Plant and Mach.	80,000		

(W-1) **Accumulated Dep. for adj. (ii)**

Period used	2 years
Accumulated Depreciation (70,000 × 10% × 2 years)	14,000

(W-2) **Accumulated Dep. of adj. (iii)**

Period used	1 year and 6 months
Accumulated Dep. (80,000 × 10% × 1.5 years)	12,000

b)

Dr.	Furniture a/c		Cr.
Un adj. Cl.	800,000	Adj. (i)	30,000
Adj. (ii)	18,000		
		c/d	788,000

Dr.	Plant and Machinery a/c		Cr.
Un adj. cl.	300,000	Adj. (iii)	47,000
		c/d	253,000

Answer-26

Date	Description	Dr.	Cr.
Jan. 1, 2009	Land	600,000	
	Cash		600,000
Dec. 31, 2009	Land	150,000	
	Revaluation surplus		150,000
Dec. 31, 2010	Revaluation surplus	150,000	
	P/L (SOCI)	20,000	
	Land		170,000
Dec. 31, 2011	Land	70,000	
	Revaluation surplus		50,000
	P/L (SOCI)		20,000
Dec. 31, 2012	Land	150,000	
	Revaluation surplus		150,000

(W-1) Calculation of revaluation surplus on land

Date	Description	Land	R. Surplus	SOCI(P/L)
1/1/09	Cost	600,000		
31/12/09	Revaluation surplus (bal.)	150,000	150,000	
31/12/09	Revalued amount	750,000		
31/12/10	Revaluation surplus (bal.)	(170,000)	(150,000)	(20,000)
31/12/10	Revalued amount	580,000	-	(20,000)
31/12/11	Revaluation surplus (bal.)	70,000	50,000	20,000
31/12/11	Revalued amount	650,000	50,000	-
31/12/12	Revaluation surplus (bal.)	150,000	150,000	
31/12/12	Revalued amount	800,000	200,000	

(W-2)

Land A/c

Dr.					Cr.
1.1.09	Cash	600,000			
31.12.09	Revaluation surplus	150,000	31.12.09	c/d	750,000
1.1.10	b/d	750,000	31.12.10	Revaluation surplus	150,000
			31.12.10	P/L (SOCI)	20,000
			31.12.10	c/d	580,000
1.1.11	b/d	580,000			
31.12.11	Revaluation Surplus	50,000			
31.12.11	P/L	20,000	31.12.11	c/d	650,000
1.1.12	b/d	650,000			
31.12.12	Revaluation Surplus	150,000	31.12.12	c/d	800,000

Revaluation surplus

Dr		Rs			Cr. Rs
31-12-09	Bal c/d	150,000	31-12-09	Land	150,000
31-12-10	Land	150,000	1-01-10	Bal b/d	150,000
31-12-11	Bal c/d	50,000	31-12-11	Land	50,000
			01-01-12	Bal b/d	50,000
31-12-12	Bal c/d	200,000	31-12-12	Land	150,000
		200,000			200,000

Answer-27

Date	Description	Dr.	Cr.
Jan, 1, 2005	Land	700,000	
	Bank		700,000
Dec, 31, 2005	Land	100,000	
	Revaluation Surplus		100,000
Dec, 31, 2006	Revaluation Surplus	100,000	
	P/L	20,000	
	Land		120,000
Dec, 31, 2007	Land	70,000	
	P/L		20,000
	Revaluation Surplus		50,000
Dec, 31, 2008	Land	75,000	
	Revaluation Surplus		75,000

(W-l) Calculation of revaluation surplus on land

Date	Description	Land	R. Surplus	SOCI(P/L)
1/1/05	Cost	700,000		
31/12/05	Revaluation surplus (bal.)	100,000	100,000	
31/12/05	Revalued amount	800,000		
31/12/06	Revaluation surplus (bal.)	(120,000)	(100,000)	(20,000)
31/12/06	Revalued amount	680,000	-	(20,000)
31/12/07	Revaluation surplus (bal.)	70,000	50,000	20,000
31/12/07	Revalued amount	750,000	50,000	-
31/12/08	Revaluation surplus (bal.)	75,000	75,000	
31/12/08	Revalued amount	825,000	125,000	

(W-2)

Land a/c

Dr.					Cr.
1-1-2005	Bank	700,000			
31-12-2005	Revaluation Surplus	100,000	31-12-2005	c/d	800,000
1-1-2006	b/d	800,000	31-12-2006	Revaluation Surplus	100,000
			31-12-2006	P/L	20,000
			31-12-2006	c/d	680,000
1-1-2007	b/d	680,000			
31-12-2007	Revaluation Surplus	50,000			
31-12-2007	P/L	20,000	31-12-2007	c/d	750,000
1-1-2008	b/d	750,000			
31-12-2008	Revaluation Surplus	75,000	31-12-2007	c/d	825,000

Revaluation surplus

Dr.		Rs.			Cr. Rs.
31-12-05	Bal c/d	100,000	31-12-05	Land	100,000
31-12-06	Land	100,000	01-01-06	Bal b/d	100,000
31-12-07	Bal c/d	50,000	31-12-07	Land	50,000
			01-01-08	Bal b/d	50,000
31-12-08	Bal c/d	125,000	31-12-08	Land	75,000
		125,000			125,000

Answer-28

Journal entries

Date	Particular	Dr.	Cr.
1/1/2001	Plant	100,000	
	Cash		100,000
31/12/2001	Depreciation	10,000	
..	Accumulated depreciation		10,000
1/1/2002	Accumulated depreciation	10,000	
	Plant		10,000

1/1/2002	Plant	90,000	
	Revaluation surplus		90,000
31/12/2002	Depreciation	20,000	
	Accumulated depreciation		20,000
31/12/2002	Revaluation surplus (90,000/9)	10,000	
	Retained earnings		10,000
1/1/2003	Accumulated depreciation	20,000	
	Plant		20,000
1/1/2003	Revaluation surplus	80,000	
	P/L	20,000	
	Plant		100,000
31/12/2003	Depreciation	7,500	
	Accumulated depreciation		7,500
1/1/2004	Accumulated depreciation	7,500	
	Plant		7,500
1/1/2004	Plant	24,500	
	Revaluation surplus		7,000
	P/L		17,500
31/12/2004	Depreciation	11,000	
	Accumulated depreciation		11,000
31/12/2004	Revaluation surplus (7,000/7)	1,000	
	Retained earnings		1,000
1/1/2005	Accumulated depreciation	11,000	
	Plant		11,000
1/1/2005	Plant	54,000	
	Revaluation surplus		54,000
31/12/2005	Depreciation	20,000	
	Accumulated depreciation		20,000
31/12/2005	Revaluation surplus	10,000	
	Retained earnings		10,000

(W-1) Calculation of revaluation surplus and depreciation on plant

Date	Description	Plant	R. Surplus	SOCI(P/L)
01/1/01	Cost	100,000		
31/12/01	Depreciation (100,000/10)	(10,000)		
31/12/01	WDV	90,000		
1/1/02	Revaluation surplus (bal.)	90,000	90,000	
1/1/02	Revalued amount	180,000	90,000	
31/12/02	Depreciation (180,000/9) : (90,000/9)	(20,000)	(10,000)	-
31/12/02	WDV	160,000	80,000	-
1/1/03	Revaluation surplus (bal.)	(100,000)	(80,000)	(20,000)
1/1/03	Revalued amount	60,000	-	(20,000)
31/12/03	Depreciation (60,000/8) : (20,000/8)	(7,500)		2,500
31/12/03	WDV	52,500		(17,500)

1/1/04	Revaluation surplus (bal.)	24,500	7,000	17,500
1/1/04	Revalued amount	77,000	7,000	-
31/12/04	Depreciation (77,000/7):(7,000/7)	(11,000)	(1,000)	
31/12/04	WDV	66,000	6,000	
1/1/05	Revaluation surplus (bal.)	54,000	54,000	
1/1/05	Revalued amount	120,000	60,000	
31/12/05	Depreciation (120,000/6):(60,000/6)	(20,000)	(10,000)	
31/12/05	WDV	100,000	50,000	

(W-2)

Plant account

Dr.					Cr
1-1-2001	Cash	100,000			
			31-12-2001	c/d	100,000
1-1-2002	b/d	100,000	1-1-2002	Acc. Depreciation	10,000
1-1-2002	Rev. Surplus	90,000	31-12-2002	c/d	180,000
1-1-2003	b/d	180,000	1-1-2003	Acc. Depreciation	20,000
			1-1-2003	Rev. Surplus	80,000
			1-1-2003	P/L	20,000
			31-12-2003	c/d	60,000
1-1-2004	b/d	60,000	1-1-2004	Acc. Depreciation	7,500
1-1-2004	Rev. Surplus	7,000			
1-1-2004	P/L	17,500	31-12-2004	c/d	77,000
1-1-2005	b/d	77,000	1-1-2005	Acc. Depreciation	11,000
1-1-2005	Revaluation Surplus	54,000	31-12-2005	c/d	120,000

Accumulated Depreciation a/c

Dr.					Cr.
31-12-2001	c/d	10,000	31-12-2001	Depreciation	10,000
1-1-2002	Plant	10,000	1-1-2002	b/d	10,000
31-12-2002	c/d	20,000	31-12-2002	Dep. Expense	20,000
1-1-2003	Plant	20,000	1-1-2003	b/d	20,000
31-12-2003	c/d	7,500	31-12-2003	Depreciation	7,500
1-1-2004	Plant	7,500	1-1-2004	b/d	7,500
31-12-2004	c/d	11,000	31-12-2004	Depreciation	11,000
1-1-2005	Plant	11,000	1-1-2005	b/d	11,000
31-12-2005	c/d	20,000	31-12-2005	Depreciation	20,000

Revaluation Surplus account

Dr.					Cr.
31-12-2002	Retained Earnings	10,000	1-1-2002	Plant.	90,000
31-12-2002	c/d	80,000			
1-1-2003	Plant	80,000	1-1-2003	b/d	80,000
31-12-2003	c/d	--			
31-12-2004	Retained Earning	1,000	1-1-2004	Plant	7,000
31-12-2004	c/d	6,000			
31-12-2005	Retained Earning	10,000	1-1-2005	b/d	6,000
31-12-2005	c/d	50,000	1-1-2005	Plant	54,000

Dr **Retained earnings** **Cr**

		Rs			Rs
31-12-02	Bal c/d	10,000	31-12-02	Rev. surplus	10,000
31-12-03	Bal c/d	10,000	01-01-03	Bal b/d	10,000
			01-01-04	Bal b/d	10,000
31-12-04	Bal c/d	11,000	31-12-04	Rev. surplus	1,000
		11,000			11,000
			01-01-05	Bal b/d	11,000
31-12-05	Bal c/d	21,000	31.12.05	Rev. surplus	10,000
		21,000			21,000

Answer-29

Entries:

Date	Particulars	Dr.	Cr.
1-1-2010	Building	500,000	
	Cash		500,000
31-12-2010	Depreciation expenses	25,000	
	Accumulated Depreciation		25,000
1-1-2011	Accumulated Depreciation	25,000	
	Building		25,000
1-1-2011	Building	75,000	
	Revaluation Surplus		75,000
31-12-2011	Depreciation Expense	28,947	
	Accumulated Depreciation		28,947
31-12-2011	Revaluation Surplus (75,000/19)	3,947	
	Retained Earnings		3,947
1-1-2012	Accumulated Depreciation	28,947	
	Building		28,947
1-1-2012	Revaluation Surplus	71,053	
	P/L	70,000	
	Building		141,053
31-12-2012	Depreciation Expense	21,111	
	Accumulated Expenses		21,111
1-1-2013	Accumulated Depreciation	21,111	
	Building		21,111
1-1-2013	Building	391,111	
	Revaluation surplus		325,000
	P/L		66,111
31-12-2013	Depreciation Expense	44,118	
	Accumulated Depreciation		44,118
31-12-2013	Revaluation Surplus (325,000/17)	19,118	
	Retain Earnings		19,118
1-1-2014	Accumulated Depreciation	44,118	
	Building		44,118
1-1-2014	Building	94,118	
	Revaluation Surplus		94,118
31-12-2014	Depreciation Expense	50,000	
	Accumulated Depreciation		50,000

31-12-2014	Revaluation Surplus	25,000	
	Retained Earnings		25,000

(W-l) Calculation of revaluation surplus and depreciation on building

Date	Description	Building	R. Surplus	SOCI(P/L)
1/1/10	Cost	500,000		
31/12/10	Depreciation (500,000/20)	(25,000)		
31/12/10	WDV	475,000		
1/1/11	Revaluation surplus (bal.)	75,000	75,000	
1/1/11	Revalued amount	550,000	75,000	
31/12/11	Depreciation (550,000/19):(75,000/19)	(28,947)	(3,947)	-
31/12/11	WDV	521,053	71,053	-
1/1/12	Revaluation surplus (bal.)	(141,053)	(71,053)	(70,000)
1/1/12	Revalued amount	380,000	-	(70,000)
31/12/12	Depreciation (380,000/18):(70,000/l8)	(21,111)		3,889
31/12/12	WDV	358,889		(66,111)
1/1/13	Revaluation surplus (bal.)	391,111	325,000	66,111
1/1/13	Revalued amount	750,000	325,000	
31/12/13	Depreciation (750,000/17):(325,000/17)	(44,118)	(19,118)	
31/12/13	WDV	705,882	305,882	
1/1/14	Revaluation surplus (bal.)	94,118	94,118	
1/1/14	Revalued amount	800,000	400,000	
31/12/14	Depreciation (800,000/16):(400,000/16)	(50,000)	(25,000)	
31/12/14	WDV	750,000	375,000	

(W-2)

Building Account

Dr.					Cr.
1-1-2010	Cash	500,000	31-12-2010	c/d	500,000
1-1-2011	b/d	500,000	1-1-2011	Acc. Depreciation	25,000
1-1-2011	Revaluation Surplus	75,000	31-12-2011	c/d	550,000
1-1-2012	b/d	550,000	1-1-2012	Acc. Depreciation	28,947
			1-1-2012	Rev. surplus	71,053
			1-1-2012	P/L	70,000
			31-12-2012	c/d	380,000
1-1-2013	b/d	380,000	1-1-2013	Acc. Depreciation	21,111
1-1-2013	Revaluation surplus	325,000			
1-1-2013	P/L	66,111	31-12-2013	c/d	750,000
1-1-2014	b/d	750,000	1-1-2014	Acc. Depreciation	44,118
1-1-2014	Revaluation surplus	94,118	31-12-2014	c/d	80,000

(W-3)

Accumulated Depreciation Account

Dr.					Cr.
			31-12-2010	Dep. Expense	25,000
31-12-2010	c/d	25,000			
1-1-2011	Building	25,000	1-1-2011	b/d	25,000
31-12-2011	c/d	28,947	31-12-2011	Dep. Expense	28,947

31-12-2014	Revaluation Surplus	25,000	
	Retained Earnings		25,000

(W-l) Calculation of revaluation surplus and depreciation on building

Date	Description	Building	R. Surplus	SOCI(P/L)
1/1/10	Cost	500,000		
31/12/10	Depreciation (500,000/20)	(25,000)		
31/12/10	WDV	475,000		
1/1/11	Revaluation surplus (bal.)	75,000	75,000	
1/1/11	Revalued amount	550,000	75,000	
31/12/11	Depreciation (550,000/19):(75,000/19)	(28,947)	(3,947)	-
31/12/11	WDV	521,053	71,053	-
1/1/12	Revaluation surplus (bal.)	(141,053)	(71,053)	(70,000)
1/1/12	Revalued amount	380,000	-	(70,000)
31/12/12	Depreciation (380,000/18):(70,000/18)	(21,111)		3,889
31/12/12	WDV	358,889		(66,111)
1/1/13	Revaluation surplus (bal.)	391,111	325,000	66,111
1/1/13	Revalued amount	750,000	325,000	
31/12/13	Depreciation (750,000/17):(325,000/17)	(44,118)	(19,118)	
31/12/13	WDV	705,882	305,882	
1/1/14	Revaluation surplus (bal.)	94,118	94,118	
1/1/14	Revalued amount	800,000	400,000	
31/12/14	Depreciation (800,000/16):(400,000/16)	(50,000)	(25,000)	
31/12/14	WDV	750,000	375,000	

(W-2)

Building Account

Dr.					Cr.
1-1-2010	Cash	500,000			
			31-12-2010	c/d	500,000
1-1-2011	b/d	500,000	1-1-2011	Acc. Depreciation	25,000
1-1-2011	Revaluation Surplus	75,000	31-12-2011	c/d	550,000
1-1-2012	b/d	550,000	1-1-2012	Acc. Depreciation	28,947
			1-1-2012	Rev. surplus	71,053
			1-1-2012	P/L	70,000
			31-12-2012	c/d	380,000
1-1-2013	b/d	380,000	1-1-2013	Acc. Depreciation	21,111
1-1-2013	Revaluation surplus	325,000			
1-1-2013	P/L	66,111	31-12-2013	c/d	750,000
1-1-2014	b/d	750,000	1-1-2014	Acc. Depreciation	44,118
1-1-2014	Revaluation surplus	94,118	31-12-2014	c/d	80,000

(W-3)

Accumulated Depreciation Account

Dr.					Cr.
			31-12-2010	Dep. Expense	25,000
31-12-2010	c/d	25,000			
1-1-2011	Building	25,000	1-1-2011	b/d	25,000
31-12-2011	c/d	28,947	31-12-2011	Dep. Expense	28,947

1-1-2012	Building	28,947	1-1-2012	b/d	28,947
31-12-2012	c/d	21,111	31-12-2012	Dep. Expense	21,111
1-1-2013	Building	21,111	1-1-2013	b/d	21,111
31-12-2013	c/d	44,118	31-12-2013	Dep. Expense	44,118
1-1-2014	Building	44,118	1-1-2014	b/d	44,118
31-12-2014	c/d	50,000	31-12-2014	Dep. Expense	50,000

(W-4)

Revaluation Surplus Account

Dr.					Cr.
31-12-2011	Retained Earnings	3,947	1-1-2011	Building	75,000
31-12-2011	c/d	71,053			
1-1-2012	Building C/d	71,053	1-1-2012	b/d	71,053
31-12-2013	Retained Earnings	19,118	1-1-2013	Building	325,000
31-12-2013	c/d	305,882			
31-12-2014	Retained Earnings	25,000	1-1-2014	b/d	305,882
31-12-2014	c/d	375,000	1-1-2014	Building	94,118

Retained earnings

Dr		Rs			Rs
31-12-11	Bal c/d	3,947	31-12-11	Revaluation surplus	3,947
31-12-12	Bal c/d	3,947	01-01-12	Bal b/d	3,947
			01-01-13	Bal b/d	3,947
31-12-13	Bal c/d	23,065		Revaluation surplus	19,118
		23,065			23,065
			01-01-14	Bal b/d	23,068
31-12-14	Bal c/d	48,065	31-12-14	Revaluation surplus	25,000
		48,065			48,065

Answer-30

Journal entries

Date	Particulars	Dr.	Cr.
1/1/01	Plant	200,000	
	Bank		200,000
	(Purchase of plant)		
31/12/01	Depreciation expense	20,000	
	Accumulated depreciation		20,000
	(Recording of depreciation on plant)		
31/12/02	Depreciation expense	20,000	
	Accumulated depreciation		20,000
	(Recording of depreciation on plant)		
31/12/02	Accumulated depreciation (20,000 + 20,000)	40,000	
	Plant		40,000
	(Transfer of accumulated depreciation to plant)		
31/12/02	Plant	120,000	
	Revaluation surplus		120,000
	(Recording of revaluation surplus)		
31/12/03	Depreciation expense	35,000	
	Accumulated depreciation		35,000
	(Recording of depreciation on plant)		

31/12/03	Revaluation surplus	15,000	
	Retained earning		15,000
	(Transfer of revaluation surplus to retained earnings)		
31/12/03	Accumulated depreciation	35,000	
	Plant		35,000
	(Transfer of accumulated depreciation to plant)		
31/12/03	Revaluation surplus	105,000	
	P/L	60,000	
	Plant		165,000
	(Recording of revaluation loss)		
31/12/04	Depreciation expense	11,429	
	Accumulated depreciation		11,429
	(Recording of depreciation on plant)		
31/12/04	Accumulated depreciation	11,429	
	Plant		11,429
	(Transfer of accumulated depreciation to plant)		
31/12/04	P/L	8,571	
	Plant		8,571
	(Recording of revaluation loss)		
31/12/05	Depreciation expense	10,000	
	Accumulated depreciation		10,000
	(Recording of depreciation on plant)		
31/12/05	Accumulated depreciation	10,000	
	Plant		10,000
	(Transfer of accumulated depreciation to plant)		
31/12/05	Plant	70,000	
	Revaluation surplus		20,000
	Revaluation loss		50,000
	(Recording of revaluation surplus)		

(W-1) Calculation of revaluation surplus and depreciation

Date	Description	Building	R. Surplus	SOCI(P/L)
1/1/01	Cost	200,000		
31/12/01	Depreciation (200,000/10)	(20,000)		
31/12/01	WDV	180,000		
31/12/02	Depreciation (200,000/10)	(20,000)		
31/12/02	WDV	160,000		
31/12/02	Revaluation surplus (bal.)	120,000	120,000	
31/12/02	Revalued amount	280,000	120,000	
31/12/03	Depreciation (280,000/8):(120,000/8)	(35,000)	(15,000)	
31/12/03	WDV	245,000	105,000	
31/12/03	Revaluation surplus (bal.)	(165,000)	(105,000)	(60,000
31/12/03	Revalued amount	80,000	-	(60,000
31/12/04	Depreciation (80,000/7):(60,000/7)	(11,429)		8,57
31/12/04	WDV	68,571	-	(51,429
31/12/04	Revaluation surplus (bal.)	(8,571)		(8,571
31/12/04	Revalued amount	60,000	-	(60,000
31/12/05	Depreciation (60,000/6):(60,000/6)	(10,000)		10,00
31/12/05	WDV	50,000		(50,000
31/12/05	Revaluation surplus (bal.)	70,000	20,000	50,00
31/12/05	Revalued amount	120,000	20,000	

Plant account

Dr		Rs			Cr Rs
01-01-01	Bank	200,000	31-12-01	Bal c/d	200,000
01-01-02	Bal b/d	200,000	31-12-02	Acc. dep	40,000
31-12-02	Revaluation surplus	120,000	31-12-02	Bal c/d	280,000
		320,000			320,000
01-01-03	Bal b/d	280,000	31-12-03	Acc. dep	35,000
			31-12-03	Rev. surplus	105,000
			31-12-03	P/L	60,000
			31-12-03	Bal c/d	80,000
		280,000			280,000
01-01-04	Bal b/d	80,000	31-12-04	Acc. dep	11,429
			31-12-04	P/L	8,751
			31-12-04	Bal c/d	60,000
		80,000			80,000
01-01-05	Bal b/d	60,000	31-12-05	Acc. dep	10,000
31-12-05	P/L	50,000			
31-12-05	Rev. surplus	20,000	31-12-05	Bal c/d	120,000
		130,000			130,000

Retained earnings

Dr		Rs			Cr Rs
31-12-03	Bal c/d	15,000	31-12-03	Rev. surplus	15,000
31-12-04	Bal c/d	15,000	01-01-04	Bal b/d	15,000
31-12-05	Bal c/d	15,000	01-01-05	Bal b/d	15,000

Accumulated depreciation account

Dr		Rs			Cr Rs
31-12-01	Bal c/d	20,000	31-12-01	Depreciation	20,000
31-12-02	Plant	40,000	01-01-02	Bal b/d	20,000
31-12-02	Bal c/d	-	31-12-02	depreciation	20,000
		40,000			40,000
31-12-03	Plant	35,000	01-01-03	Bal b/d	-
31-12-03	Bal c/d	-	31-12-03	depreciation	35,000
		35,000			35,000
31-12-04	Plant	11,429	01-01-04	Bal b/d	-
31-12-04	Bal c/d	-	31-12-04	depreciation	11,429
		11,429			11,429
31-12-05	Plant	10,000	01-01-05	Bal b/d	-
31-12-05	Bal c/d	-	31-12-05	depreciation	10,000
		10,000			10,000

Answer-31

Journal entries Rs. million

Date	Particulars	Dr.	Cr.
1/7/15	Plant	100	
	Bank		100
	(Purchase of plant)		
30/6/16	Depreciation expense	10	
	Accumulated depreciation		10
	(Recording of depreciation on plant)		

30/6/16	Accumulated depreciation	10	
	Plant		10
	(Transfer of accumulated depreciation to plant)		
30/6/16	P/L (Revaluation loss)	10	
	Plant		10
	(Recording of revaluation deficit)		
30/6/17	Depreciation expense	8.89	
	Accumulated depreciation		8.89
	(Recording of depreciation on plant)		
30/6/17	Accumulated depreciation	8.89	
	Plant		8.89
	(Transfer of accumulated depreciation to plant)		
30/6/17	Plant	23.89	
	Revaluation surplus		15
	P/L		8.89
	(Recording of revaluation surplus)		
30/6/18	Depreciation expense	11.875	
	Accumulated depreciation		11.875
	(Recording of depreciation on plant)		
30/6/18	Revaluation Surplus	1.875	
	Retained earnings		1.875
	(transfer of remaining revaluation surplus to retained earnings)		
30/6/18	Accumulated depreciation	11.875	
	Plant		11.875
	(Transfer of accumulated depreciation to plant)		
30/6/18	Plant	26.875	
	Revaluation surplus		26.875
	(Recording of revaluation surplus)		

(W-1) Calculation of revaluation surplus and depreciation

Date	Description	Plant Rs. Million	R. Surplus Rs. Million	SOCI(P/L) Rs. Million
1/7/15	Cost	100		
30/6/16	Depreciation (100/10)	(10)		
30/6/16	WDV	90		
30/6/16	Revaluation surplus/ (loss) (bal.)	(10)		(10)
30/6/16	Revalued amount	80		(10)
30/6/17	Depreciation (80/9):(10/9)	(8.89)		1.11
30/6/17	WDV	71.11		(8.89)
30/6/17	Revaluation surplus (bal.)	23.89	15	8.89
30/6/17	Revalued amount	95	15	0
30/6/18	Depreciation (95/8):(15/8)	(11.875)	(1.875)	
30/6/18	WDV	83.125	13.125	
30/6/18	Revaluation surplus (bal.)	26.875	26.875	
30/6/18	Revalued amount	110	40	

Plant account

Dr		Rs			Cr Rs
01-07-15	Bank	100,000	30-06-16	Acc. dep	10,000
			30-06-16	P/L	10,000
			30-06-16	Bal c/d	80,000
		100,000			100,000
01-07-16	Bal b/d	80,000	30-06-17	Acc. dep	8,889
30-06-17	P/L	8,889			
30-06-17	Rev. surplus	15,000	30-06-17	Bal c/d	95,000
		103,889			103,889
01-07-17	Bal b/d	95,000	30-06-18	Acc. Dep	11,875
30-06-18	Rev. surplus	26,875	30-06-18	Bal c/d	11,000
		121,875			121,875

Revaluation surplus

Dr		Rs			Cr Rs
30-06-16	Bal c/d	-	01-07-15	Bal b/d	-
			01-07-16	Bal b/d	-
30-06-17	Bal c/d	15,000	30-06-17	Plant	15,000
		15,000			15,000
30-06-18	Retained earnings	1,875	01-07-17	Bal b/d	15,000
30-06-18	Bal c/d	40,000	30-06-18	Plant	26,875
		41,875			41,875

Accumulated depreciation account

Dr		Rs			Cr Rs
30-06-16	Plant	10,000	01-07-15	Bal b/d	-
30-06-16	Bal c/d	-	30-06-16	Depreciation	10,000
		10,000			10,000
30-06-17	Plant	8,889	01-07-16	Bal b/d	-
30-06-17	Bal c/d	-	30-06-17	Depreciation	8,889
		8,889			8,889
30-06-18	Plant	11,875	01-07-17	Bal b/d	-
30-06-18	Bal c/d	-	30-06-18	Depreciation	11,875
		11,875			11,875

Retained earnings

Dr		Rs			Cr Rs
30-06-18	Bal c/d	1,875	30-06-18	Revaluation surplus	1,875
		1,875			1,875

Answer-32

Journal entries Rs.

Date	Particulars	Dr.	Cr.
1/7/10	Plant	500,000	
	Bank		500,000
	(Purchase of plant)		
30/6/11	Depreciation expense	25,000	
	Accumulated depreciation		25,000

	(Recording of depreciation on plant)		
1/7/11	Accumulated depreciation	25,000	
	Plant		25,000
	(Transfer of accumulated depreciation to plant)		
1/7/11	Plant	5,000	
	Revaluation surplus		5,000
	(Recording of revaluation surplus)		
30/6/12	Depreciation expense	25,263	
	Accumulated depreciation		25,263
	(Recording of depreciation on plant)		
30/6/12	Revaluation surplus	263	
	Retained earning		263
	(Transfer of revaluation surplus to retained earnings)		
1/7/12	Accumulated depreciation	25,263	
	Plant		25,263
	(Transfer of accumulated depreciation to plant)		
1/7/12	Revaluation surplus	4,737	
	P/L (bal.)	60,000	
	Plant		64,737
	(Recording of revaluation loss)		
30/6/13	Depreciation expense	21,667	
	Accumulated depreciation		21,667
	(Recording of depreciation on plant)		
1/7/13	Accumulated depreciation	21,667	
	Plant		21,667
	(Transfer of accumulated depreciation to plant)		
1/7/13	Plant	81,667	
	P/L		56,667
	Revaluation surplus		25,000
	(Recording of revaluation surplus)		
30/6/14	Depreciation expense	26,471	
	Accumulated depreciation		26,471
	(Recording of depreciation on plant)		
30/6/14	Revaluation surplus	1,471	
	Retained earnings		1,471
	(Transfer of revaluation surplus to retained earnings)		

(W-1) Calculation of revaluation surplus and depreciation

Rs.

Date	Description	Plant	R. Surplus	SOCI(P/L)
1/7/10	Cost	500,000		
30/6/11	Depreciation (500,000/20)	(25,000)		
30/6/11	WDV	475,000		
1/7/11	Revaluation surplus (bal.)	5,000	5,000	
1/7/11	Revalued amount	480,000	5,000	
30/6/12	Depreciation (480,000/19):(5,000/19)	(25,263)	(263)	

30/6/12	WDV	454,737	4,737	
1/7/12	Revaluation surplus (bal.)	(64,737)	(4,737)	(60,000)
1/7/12	Revalued amount	390,000		(60,000)
30/6/13	Depreciation(390,000/18):(60,000/18)	(21,667)		3,333
30/6/13	WDV	368,333		(56,667)
1/7/13	Revaluation surplus (bal.)	81,667	25,000	56,667
1/7/13	Revalued amount	450,000	25,000	-
30/6/14	Depreciation (450,000/17):(25,000/17)	(26,471)	(1,471)	
30/6/14	WDV	423,529	23,529	

Plant account

Dr		Rs			Cr Rs
01-07-10	Bank	500,000	30-06-11	Bal c/d	500,000
01-07-11	Bal b/d	500,000	01-07-11	Acc. dep	25,000
01-07-11	Rev. surplus	5,000	30-06-12	Bal c/d	480,000
		505,000			505,000
01-07-12	Bal b/d	480,000	01-07-12	Acc. dep	25,263
			01-07-12	Rev. surplus	4,737
			01-07-12	P/L	60,000
			30-06-13	Bal c/d	390,000
		480,000			480,000
01-07-13	Bal b/d	390,000	01-07-13	Acc. dep	21,667
01-07-13	Rev. surplus	81,667	30-06-14	Bal c/d	450,000
		471,667			471,667

Accumulated depreciation account

Dr		Rs			Cr Rs
			01-07-10	Bal b/d	-
30-06-11	Bal c/d	25,000	30-06-11	Depreciation	25000
		25,000			25,000
01-07-11	Plant	25,000	01-07-11	Bal b/d	25,000
30-06-12	Bal c/d	25,263	30-06-12	Depreciation	25,263
		50,263			50,263
01-07-12	Plant	25,263	01-07-12	Bal b/d	25,263
30-06-13	Bal c/d	21,667	30-06-13	Depreciation	21,667
		46,930			46,930
01-07-13	Plant	21,667	01-07-13	Bal b/d	21,667
30-06014	Bal c/d	26,471	30-06-14	Depreciation	26,471
		48,138			48,138

Revaluation surplus

Dr		Rs			Cr Rs
30-06-12	Retained earnings	263	01-07-11	Plant	5,000
30-06-12	Bal c/d	4,737			
		5,000			5,000
01-07-12	Plant	4,737	01-07-12	Bal b/d	4,737
30-06-14	Retained earning	1,471	01-07-13	Bal b/d	-
30-06-14	Bal c/d	23,529	0107-13	plant	25,000
		25,000			25,000

Dr **Retained earnings** **Cr**

		Rs			Rs
30-06-12	Bal c/d	263	30-06-12	Revaluation surplus	263
30-06-13	Bal c/d	263	01-07-12	Bal b/d	263
			01-07-13	Bal b/d	263
30-06-14	Bal c/d	1,734	30-06-14	Revaluation surplus	1,471
		1,734			1,734

Answer-33

Journal entries

Date	Particulars	Dr. (Rs.)	Cr. (Rs.)
1/1/11	Plant	600,000	
	Bank		600,000
	(Purchase of plant)		
31/12/11	Depreciation expense	40,000	
	Accumulated depreciation		40,000
	(Recording of depreciation on plant)		
31/12/12	Depreciation expense	40,000	
	Accumulated depreciation		40,000
	(Recording of depreciation on plant)		
31/12/12	Accumulated depreciation (40,000 + 40,000)	80,000	
	Plant		80,000
	(Transfer of accumulated depreciation to plant)		
31/12/12	Plant	30,000	
	Revaluation surplus		30,000
	(Recording of revaluation surplus)		
31/12/13	Depreciation expense	42,308	
	Accumulated depreciation		42,308
	(Recording of depreciation on plant)		
31/12/13	Revaluation surplus	2,308	
	Retained earning		2,308
	(Transfer of revaluation surplus to retained earnings)		
31/12/14	Depreciation expense	42,308	
	Accumulated depreciation		42,308
	(Recording of depreciation on plant)		
31/12/14	Revaluation surplus	2,308	
	Retained earning		2,308
	(Transfer of revaluation surplus to retained earnings)		
31/12/15	Depreciation expense	42,308	
	Accumulated depreciation		42,308
	(Recording of depreciation on plant)		

31/12/15	Revaluation surplus	2,308	
	Retained earnings		2,308
	(Transfer of revaluation surplus to retained earnings)		
31/12/15	Accumulated depreciation (42,308 × 3)	126,924	
	Plant		126,924
	(Transfer of accumulated depreciation to plant)		
31/12/15	P/L (bal.)	300,000	
	Revaluation surplus	23,076	
	Plant		323,076
	(Recording of revaluation loss)		

W-1) Calculation of revaluation surplus and depreciation

Date	Description	Plant	R. Surplus	Rs. SOCI(P/L)
1/1/11	Cost	600,000		
31/12/11	Depreciation (600,000/15)	(40,000)		
31/12/11	WDV	560,000		
31/12/12	Depreciation (600,000/15)	(40,000)		
31/12/12	WDV	520,000		
31/12/12	Revaluation surplus (bal.)	30,000	30,000	
31/12/12	Revalued amount	550,000	30,000	
31/12/13	Depreciation (550,000/13):(30,000/13)	(42,308)	(2,308)	
31/12/13	WDV	507,692	27,692	
31/12/14	Depreciation (550,000/13):(30,000/13)	(42,308)	(2,308)	
31/12/14	WDV	465,384	25,384	
31/12/15	Depreciation (550,000/13):(30,000/13)	(42,308)	(2,308)	
31/12/15	WDV	423,076	23,076	
31/12/15	Revaluation surplus/loss (bal.)	(323,076)	(23,076)	(300,000)
31/12/15	Revalued amount	100,000	-	(300,000)

Answer-34

Journal Entries

Date	Particulars	Rs. In million Dr.	Cr.
1.1.10	Plant	300	
	Bank		300
31-12-10	Depreciation	30	
	Accumulated depreciation		30
1.1.11	Accumulated depreciation	30	
	Plant		30
1.1.11	Plant	230	
	Revaluation surplus		230
31.3.11	Depreciation	13.89	
	Accumulated depreciation		13.89
31.3.11	Revaluation surplus	6.39	
	Retained earnings		6.39
31.3.11	Bank	750	
	Accumulated depreciation	13.89	
	Plant		500

	Gain on disposal		263.89
31.3.11	Revaluation surplus	323.61	
	Retained earnings		323.61

WORKING

(W-1)

Date	Particulars	Plant	Revaluation surplus	Profit / Loss (SOCI)
1.1.10	Cost	300		
31.12.10	Depreciation (300/10)	(30)		
31.12.10	W.D.V	270		
1.1.11	Revaluation surplus	230	230	-
1.1.11	Revalued amount	500	230	-
31.3.11	Depreciation $\left[\frac{500}{9} \times \frac{3}{12}\right] : \left[\frac{230}{9} \times \frac{3}{12}\right]$	(13.89)	(6.39)	-
31.3.11	W.DV	486.11	223.61	
31.3.11	Disposal	(486.11)	(223.61)	

Answer-35

Journal Entries

Date	Particulars	Rs. In million Dr.	Cr.
1.1.12	Building	300	
	Bank		300
31.12.12	Depreciation	15	
	Accumulated depreciation		15
1.1.13	Accumulated depreciation	15	
	Building		15
1.1.13	Building	38	
	Revaluation surplus		38
31.12.13	Depreciation	17	
	Accumulated depreciation		17
31.12.13	Revaluation surplus	2	
	Retained earnings		2
1.1.14	Accumulated depreciation	17	
	Building		17
1.1.14	Revaluation surplus	36	
	Profit & loss	18	
	Building		54
31.12.14	Depreciation	14	
	Accumulated depreciation		14
1.1.13	Accumulated depreciation	14	
	Building		14
1.1.13	Building	34	
	Revaluation surplus		17
	Profit and loss		17
30.6.13	Depreciation	2	
	Accumulated depreciation		2
30.6.13	Revaluation surplus	0.125	

	Retained earnings		0.125
30.6.13	Bank	80	
	Accumulated depreciation	2	
	Building		68
	Gain		14
30.6.13	Revaluation surplus	4.125	
	Retained earning		4.125
31.12.15	Depreciation	12	
	Accumulated depreciation		12
31.12.15	Revaluation surplus	0.75	
	Retained earning		0.75

Building Account

		Rs.			Rs.
1.1.10	b/d	-			
1.1.12	bank	300	31.12.12	c/d	300
		300			300
1.1.13	b/d	300	1/1/13	Accumulated depreciation	15
1.1.13	Revaluation surplus	38			
			31.12.13	c/d	323
		338			338
1.1.14	b/d	323	1/1/14	Accumulated depreciation	17
			1.1.14	Revaluation surplus	36
			1.1.14	Profit & loss	18
			31.12.14	c/d	252
		323			323
1.1.13	b/d	252	1.1.13	Accumulated depreciation	14
1.1.15	Revaluation surplus	17	30.6.15	disposal	68
1.1.15	profit & loss	17			
			31.12.15	c/d	204
		286			286

Accumulated Depreciation

		Rs.			Rs.
			1.1.12	b/d	-
31.12.12	c/d	15	31.12.12	Depreciation	15
		15			15
1.1.13	Building	15	1.1.13	b/d	15
	c/d	17	31.12.13	Depreciation	17
		32			32
1.1.14	Building	17	1.1.14	b/d	17
	c/d	14	31.12.14	Depreciation	14
		31			31
1.1.13	Build	14	1.1.13	b/d	14
30.6.18	Disposal	2	30.6.13	Depreciation	2
	c/d	12	31.12.15	Depreciation	12
		28			28

Revaluation Surplus

		Rs.			Rs.
			1.1.13	Building	38
31.12.13	Retained earning	2			
	c/d	36			
		38			38
1.1.14	Building	36	1.1.14	b/d	36
	c/d	-			
		36			36
30.6.15	Retained earning	0.125	1.1.15	b/d	-
30.6.15	Retained earning	4.125	1.1.15	Building	17
31.12.15	Retained earning	0.75			
	c/d	12			
		17			17

Retained Earnings

		Rs.			Rs.
			31.12.13	Revaluation surplus	2
31.12.13	c/d	2			
		2			2
			1.1.14	b/d	2
31.12.14	c/d	2			
		2			2
			1.1.15	b/d	2
			30.6.15	Revaluation surplus	0.125
			30.6.15	Revaluation depreciation	4.125
			31.12.15	Revaluation surplus	0.75
31.12.13	c/d	7			
		7			7

Disposal Account

	Rs.		Rs.
Building	68	Bank	80
Gain	14	Accumulated depreciation	2
	82		82

WORKING

(W-1)

Date	Particulars	Plant	Revaluation surplus	Profit / Loss (SOCI)
1.1.12	cost	300		
31.12.12	Depreciation 300/20	(15)		
31.12.12	W.D.V	285		
1.1.13	Revaluation surplus	38	38	-
1.1.13	Revaluated amount	323	38	-
31.12.13	Depreciation [323/19] : [38/19]	(17)	(2)	

31.12.13	W.D.V	306	36	
1.1.14	Revaluation surplus	(54)	(36)	(18)
1.1.14	Revalued amount	252	-	(18)
31.12.14	Depreciation [252/18] : [18/18]	(14)		
31.12.14	W.D.V	238		(17)
1.1.13	Revaluation surplus	34	17	17
1.1.15	Revaluated amount	272	17	-
30.6.15	Depreciation $\left[\frac{68}{17} \times \frac{6}{12}\right] = \frac{17}{4}\left[\frac{4.25}{17} \times \frac{6}{12}\right]$	(2)	(0.125)	
30.6.15	W.D.V of depreciation	(66)	(4.125)	
31.12.15	W.D.V of retained	204	12.75	
31.12.15	Depreciation 204/17 : 12.75/17	(12)	(0.75)	
31.11.15	W.D.V	192	12	

Answer-36

Akhtar Limited
Notes to the Financial Statement
For the year ended June 30, 2018

10. Property Plant & Equipment	2018				2017			
	----------Rs. in millions----------							
	Plant	**Building**	**Vehicles**	**Total**	**Plant**	**Building**	**Vehicles**	**Total**
Gross Carrying Amount								
Balance 01.Jan	320	160	30	510	360	160	30	550
+Addition			10	10				-
-Transfer	(64)			(64)	(60)			(60)
+Revaluation Surplus/(Rev. Loss)	(36)			(36)	20			20
Balance 31.Dec	220	160	40	420	320	160	30	510
Accumulated Depreciation & Impairment Losses								
Balance 01.Jan	-	35	9	44	-	25	6	31
+Depreciation for the year *	64	21	4	89	60	10	3	73
-Transfer	(64)			(64)	(60)			(60)
+Impairment Loss	11			11	-			-
Balance 31.Dec	(11)	(56)	(13)	(80)	-	(35)	(9)	(44)
WDV 31.Dec	209	104	27	340	320	125	21	466
10.1 Measurement Basis	Revaluation	Cost Reducing	Cost		Revaluation	Cost	Cost	
Depreciation Method	Straight Line	Balance Method	Straight Line		Straight Line	Straight Line	Straight Line	
Useful Life/Depreciation Rate	7 years	16.84%	10 years		7 years	15 years W-3	10 years	

+Depreciation for the year*

*1 Plant Dep 2017 = 360/6 = 60

*2 Plant Dep 2018 = 320/5 = 64

*3 Building Dep 2017 = (160-10)/15 = 10

*4 Building Dep 2018 = 125x16.8373% = 21.05 = 21

*5 Cars Dep 2017 = 30/10 = 3

*6 Cars Dep 2018 = (30/10)+(10/10) = 3+1 = 4

10.2 The last revaluation of plant was performed by an independent valuer "Ghaznavi & Co" 31.12.2018

10.3 Had there been no revaluation the carrying amount of plant would have been

	2018	2017
Cost	434	434
Accumulated Depreciation (434/7 = 62 × 3, 62 × 2)	(186)	(124)
Accumulated Impairment loss (Bal.)	(39)	-
Carrying Amount	209	310

10.4 The entire plant was mortgage with the Habib Bank Limited for obtaining loan of 400 million the plant acquisition. The loan is repayable by 31-Dec-2019

10.5 During the year plant was impaired by Rs.11 million and charged as expense.

10.6 Revaluation loss of Rs. Nil (2017: Rs.10 million) was reversed during the year.

10.7 An amount of expenditure of Rs.30 million was incurred on the construction of a factory. T amount was captialised as capital work-in-progress.

A further borrowing costs of Rs.2.1 million (30 × 12% × 7/12) were capitalised in respect interest on loan obtained from the bank to finance this project.

Note: Alternatively you may make movement of Capital work in progress (WIP)

10.8 A contract was made to purchase plant and machinery worth Rs.100 million with M/s Shah Limited once the construction of factory building is completed.

10.9 During the year 2018 company has changed the depreciation method of buildings from strai line to reducing balance method. Had the method not changed, profit for the year would h been higher by Rs. 11 million.

10.10 Depreciation is charged as Follows

			2018	2017
Cost of Sales	(64 + 21 × 80%)	(60 + 10 × 80%)	80.8	68.0
Admin & Selling Expenses	(4 + 21 × 20%)	(3 + 10 × 20%)	8.2	5.0
Total Depreciation			89	73

WORKINGS

(W-1) Calculation of revaluation surplus & depreciation on plant.

Date	Description	Plant	R. Surplus	SOCI (P/L)
1-Jan-16	Cost	434		
	Depreciation (434÷7)	(62)		
31-Dec-16	WDV	372		
	Revaluation loss (bal)	(12)	-	(12
31-Dec-16	Revalued amount	**360**	-	(12
	Depreciation (360÷6) (12÷6)	(60)		2
31-Dec-17	WDV	300	-	(10
	Revaluation surplus (bal.)	20	10	10
31-Dec-17	Revalued amount	**320**	10	
	Depreciation (320/5) (10/5)	(64)	(2)	
31-Dec-18	WDV	256	8	
	Revaluation loss (reversal)	(36)	(8)	(28
31-Dec-18	Revalued amount	**220**	-	(28
	Impairment Loss	(11)		11
31-Dec-18	**Impaired Value**	**209**	-	(17

W-2 **Calculation of Impairment Loss**

Carrying Value on 31-12-2018			220
Recoverable Amount (Higher of)			
'-Fair Value less cost to sell	(220-15)	205	
'-Value in use			
$90(1+0.1)^{-1}+70(1+0.1)^{-2}+65(1+0.1)^{-3}+30(1+0.1)^{-4}$		209	209
Impairment Loss			11

W-3 **Life of Building**

Acc Dep= Cost - RV/Life x Cumulative Period

25=(160-10)/LIFE x 2.5 years

LIFE = 15 YEARS

W-4 **Building Dep Rate-WDV method** $1-\sqrt[11.5]{\frac{15}{125}}=0.168373$

ICAP PAST PAPER QUESTIONS

QUESTION-1 {Calculation Cost of Assets} {Straight Line}

Ammar is a manufacturer of personal products and has factories in two different cities. On 1 November 2011, he bought a new state-of-the-art plant from Krones Inc. USA. The invoice value of the plant was Rs. 250 million. Other relevant details are as follows:

(i)

Costs of import:	Rs. in million
LC opening charges	1.00
Import duty	25.00
Sales tax paid, recoverable against production output	40.00
Clearing & transportation	5.00

(ii)

Costs incurred on SITE preparation:	
Amount paid to consultants	2.00
Civil and electrical works	3.00
The above includes cost of equipment damaged due to mishandling	0.80

(iii) The plant was received at the SITE on 1 February 2012. The installation and test run were successfully completed in three months time at a cost of Rs. 6 million. The net sale proceeds of test production were Rs. 1.2 million.

(iv) Commercial production commenced on 1 May 2012. During the period in which the plant was installed, administration and general overheads increased by Rs. 1 million as compared to the previous period.

(v) Salary of factory manager is Rs. 250,000 per month. He contributed 30% of his time in supervising the installation.

(vi) Staff training cost amounted to Rs. 0.25 million.

(vii) The plant is expected to last fifteen years with no residual value.

Required:

In accordance with IAS-16 calculate:

- Cost at which the plant would be capitalised.
- Depreciation for the year ended 31 December 2012 under the straight line method. (08)

{Spring 2013, Q.1 (b)}

QUESTION-2 {Different methods}

The cost of a machine purchased by S. Yaseer Trading Company (Private) Limited on 1st April, 1992 is Rs. 750,000. It is estimated that the machine will have a Rs. 30,000 trade-in value at the end of its service life. Its life is estimated at 6 years. Its working hours are estimated at 25,000, its production is estimated at 400,000 units. During 1992, the machine was operated for 4200 hours and produced 80,000 units. Compute the depreciation on the machine for 1992 by:

(a) Service hours method;
(b) The productive-output method; and
(c) The sum of the year's digits method (10)

{October 1993, CA Inter - II}

QUESTION-3 {Different Methods}

A business purchased a machine costing Rs. 1,120,000 on April 01, 2002. The machine can be used for a total of 20,000 hours over an estimated life of 48 months. At the end of that time the machine is expected to have a trade in value of Rs. 112,000.

The financial year of the business ends on December 31st each year. It is expected that the machine will be used for:

4,000 hours during the financial year ending December 31, 2002.
5,000 hours during the financial year ending December 31, 2003.
5,000 hours during the financial year ending December 31, 2004.
5,000 hours during the financial year ending December 31, 2005.
1,000 hours during the financial year ending December 31, 2006.

Required:

(a) Calculate the annual depreciation charges on the machine on each of the following bases for each of the financial years ending on December 31, 2002, 2003, 2004, 2005 and 2006:
(i) the straight line method applied on monthly basis and
(ii) the usage method. **(04)**

(b) Suppose that during the financial year ending December 31, 2003 the machine was used for only 1,500 hours before being sold for Rs. 800,000 on June 30, 2003.
Assuring that the business has chosen to apply the straight line method on a month for month basis, show the following accounts for 2003 only;
(i) the machine account
(ii) the provision for depreciation machine account; and
(iii) the assets disposals account **(05)**

{Autumn 2002, Q # 8}

QUESTION-4 {Calculation Cost of Assets & Change in Estimate}

(a) What conditions must be satisfied if an item has to be recognized as property, plant and equipment? Also state at what amount such item shall be carried after the initial recognition if the entity is following the revaluation model.

(b) On 1 January 2013 Delta acquired a specialized machine for its production department. The available information is as follows:

	Rupees
List price of machine	9,200,000
Freight charges	263,000
Electrical installation cost	245,000
Staff training for use of machine	351,000
Pre-production testing	193,000
Purchase of a three year maintenance contract	528,000
Estimated residual value	175,000

Trade discount on list price	5%
Early settlement discount taken	3%
Estimated life (in machine hours)	12,000

Machine hours used during the years ended 31 December 2013, 2014 and 2015 were 2,000, 3,200 and 1,400 respectively.

On 1 January 2015 Delta decided to upgrade the machine by adding new components at a cost of Rs.1,753,000. This upgrade led to a reduction in the production time per unit or goods being manufactured by the machine. The upgrade also increased the estimated remaining life of the machine at 1 January 2015 to 8,000 machine hours and its estimated residual value to Rs.350,000.

Required:

For the years ended 31 December 2013, 2014 and 2015, compute the relevant amounts to be included (under each head) in the income statement and statement of financial position.

Notes to the financial statements are not required. **(10)**

{Spring-16 Q.4 CAF-05}

QUESTION-5 {Revaluation}

Shahzad Textile Mills Limited (STML) purchased a plant for Rs. 500 million on 1 July 2010. The plant has an estimated useful life of 10 years and no residual value.
STML uses revaluation model for subsequent measurement of its property, plant and equipment and accounts for revaluations on net replacement value method. The details of revaluations performed by an independent firm of valuers are as follows:

Revaluation date	Fair value
1 July 2011	Rs. 575 million
1 July 2012	Rs. 390 million
1 July 2013	Rs. 380 million

Required:
Prepare journal entries to record the above transactions from the date of acquisition of the plant to the year ended 30 June 2014. (Ignore tax implications) (15)

{Autumn 2014, Q# 4, CAF-05}

QUESTION-6 {Revaluation}

Faraday Pharmaceutical Limited (FPL) acquired a building for Rs. 200 million on July 1, 2005. The following information relating to the building is available:

(i) It is being depreciated on the straight line basis, over 20 years.

(ii) FPL uses the revaluation model for subsequent measurement of its property, plant and equipment and accounts for revaluations on the net replacement value method. The details of revaluation carried out by the independent values during the past years are as follows:

Revaluation date	Fair value (Rs. In million)
July 1, 2006	230
July 1, 2007	170
July 1, 2008	180

(iii) FPL transfers the maximum possible amount from the revaluation surplus to retained earnings on an annual basis.

(iv) There is no change in the useful life of the building.

Required:
Prepare the journal entries to record the above transactions from the date of acquisition of the building to the year ended June 30, 2009. ()

{Autumn 2009, Q # 3, Module C}

QUESTION-7 {Revaluation}

PQR Enterprises was incorporated on 1 July 2012. The company depreciates its property, plant and equipment on straight line basis over their useful life. It uses revaluation model for subsequent measurement of the property, plant and equipment and has a policy of revaluing these after every two years.

Following information pertains to its property, plant and equipment:

				Useful life in years	
Assets	Cost as on 01-07-2013	WDV as on 01-07-2013	Value as determined by professional valuer on 30-06-2014	Original at acquisition	Remaining as determined by valuer
	-------Rs. in million-------				
Office building	6,000	5,500	5,750	12	8
Factory building	4,400	3,960	3,320	10	9
Warehouse	4,500	4,050	3,350	10	8

During the year there were no addition or deletion in the above assets.
As per policy, PQR transfers the maximum possible amount from the revaluation surplus to retained earnings on an annual basis.

Required:
Prepare necessary journal entries for the year ended 30 June 2014 and 2015. **(12)**

{Autumn-15, CAF-05 Q-3}

QUESTION-8 {Revaluation}
The following information pertains to Sherdil Limited (SL):

(i) Buildings and equipment were acquired on 1 January 2014 for Rs. 450 million and Rs. 50 million respectively.

(ii) The relevant information relating to both assets is summarised below:

Assets	Depreciation method	Life /rate	Subsequent measurement
Buildings	Straight line	20 years	Annual revaluation
Equipment	Reducing balance	10%	Cost

SL transfers the maximum possible amount from revaluation surplus to retained earnings on an annual basis.

(iii) The revalued amount of buildings as determined by Accurate Valuers (Private) Limited, an independent valuation company, on 1 January 2015 and 2016 was Rs. 456 million and Rs. 378 million respectively.

(iv) Equipment costing Rs. 35 million was purchased on 1 August 2015. Half of the equipment purchased on 1 January 2014 was disposed off on 30 June 2016.

Required:
In accordance with International Financial Reporting Standards, prepare a note on 'Property plant & equipment' (including comparative figures) for inclusion in SL's financial statements for the year ended 31 December 2016. **(18)**

{Autumn 2017, Q # 2}

QUESTION-9 {Revaluation}

(a) Following information pertains to a building acquired by SK Limited (SKL) on 1 July 2012 for Rs. 360 million:

(i) The building is being depreciated on straight-line basis over 10 years.

(ii) SKL uses revaluation model for subsequent measurement of buildings. It accounts for revaluation on net replacement value method. The details of revaluations as carried out by independent value are as follows:

Revaluation date	Fair value (Rs. in million)
31 December 2013	323
31 December 2015	208
31 December 2017	167

(iii) There is no change in useful life of the building.

(iv) SKL transfers the maximum possible amount from the revaluation surplus to retained earnings on an annual basis.

(v) SKL's financial year ends on 31 December.

Required:
Prepare entries to record revaluation surplus/loss on each of the above revaluation date. *(Entries to record depreciation expense, incremental depreciation and elimination of accumulated depreciation are not required)* **(11)**

(b) Following information pertains to three exchange transactions relating to fixed assets:

	(i)	(ii)	(iii)
	--------- Rs. in million ---------		
Cash received/(paid)	1.1	(2.1)	-
Assets given-up:			
Original cost	10.3	12.4	14.5
Book value	6.4	7.3	3.4
Estimated fair value	8.5	6.6	4.6
Assets received:			
Estimated fair value	7.1	9.0	4.1

Additional information:

- In case of transaction (i), fair values of both assets are reliably measurable.
- In case of transaction (ii), fair value of the asset received is clearly more evident.
- In case of transaction (iii), fair value of neither asset is reliably measurable.

Required:

Compute gain or loss on disposal of fixed assets in each of the above transactions. (06)

{Spring 2018, Q # 6}

QUESTION-10

The following information is available in respect of machines of Akmal Brothers:

(i) The balances of cost and accumulated depreciation of machines as on 1 January 2017 were Rs.800,000 and Rs.333,000 respectively.

(ii) A machine acquired on 1 January 2014 having net book value of Rs.31,935 on 1 January 2017 was sold for Rs.34,000 on 30 April 2017. Cost of disposal incurred was Rs.5,000.

(iii) On 1 July 2017, a machine having fair value of Rs.40,000 on that date was exchanged for a new machine. The balance of the purchase price was paid through a cheque of Rs.80,000. The list price of the new machine was Rs.130,000. The old machine had been acquired at a cost of Rs. 65,000 on 1 October 2015.

(iv) Machines are depreciated at 15% per annum using the reducing balance method.

Required:

Prepare the following ledger accounts pertaining to the machines for the year ended 31 December 2017:

(a) Cost (03)
(b) Accumulated depreciation (05)
(c) Gain/loss on disposal (04)

{Autumn 2018, Q # 5}

QUESTION-11

The following information pertains to Piano Limited (PL):

	Plant	Equipment
Acquisition		
• Date of acquisition	1 January 2015	1 July 2015
• Cost	Rs. 500 million	Rs. 360 million
• Estimated useful life	10 years	12 years
• Residual value	Rs. 60 million	Nil
• Depreciation method	Straight line method	Straight line method

Revaluation on 31 December 2016		
• Fair value	Rs. 526 million	Rs. 280 million
• Residual value	Rs. 78 million	Nil
Revaluation on 31 December 2018		
• Fair value	Rs. 310 million	Rs. 275 million
• Residual value	Rs. 64 million	Nil

Additional information:

(i) PL uses revaluation model for subsequent measurement and accounts for revaluation on net replacement value method.

(ii) There is no change in useful life of plant. The remaining useful life of equipment was estimated as 15 years and 10 years in 2016 and 2018 respectively.

(iii) PL transfers maximum possible amount from the revaluation surplus to retained earnings on an annual basis.

(iv) PL's financial year ends on 31 December.

Required:

(a) Calculate depreciation on each asset for 2015 to 2018. **(08)**

(b) Prepare entries to record revaluation in 2018. (***Entries to record depreciation expense, incremental depreciation and elimination of accumulated depreciation are not required. Further, entries prior to 2018 are also not required.***) **(08)**

{Spring 2019, Q # 5}

QUESTION-12

The following information pertains to Monday Limited (ML):

(i) The balances of property, plant and equipment as on 1 January 2018:

Assets	Cost/Revalued amount	Accumulated depreciation
	Rs. in million	
Office building	240	36
Equipment	190	60

Revaluation surplus related to the office building as at 1 January 2018 amounted to Rs.8.5 million.

(ii) On 1 September 2018, a new equipment was acquired by making payment of Rs.70 million to the supplier. An old equipment was also given in exchange to the supplier. The fair values of the old and new equipment were assessed at Rs.21 million and Rs.93 million respectively. The old equipment had been acquired at a cost of Rs.40 million on 1 July 2016. Cost incurred on installing the new equipment amounted to Rs.5 million.

(iii) On 1 January 2018, ML commenced construction of a manufacturing plant. The whole process of assembling and installation was completed on 31October 2018. However, the work was stopped from 16 to 31 August-2018 due to unexpected rains.

The total cost of Rs.660 million incurred on the plant was paid as under:

Description	Payment date	Rs.in million
1st payment	1 February 2018	140
2nd payment	1 April 2018	214
3rd payment	1 September 2018	146
4th payment	1 December 2018	160

The plant was financed through a bank loan of Rs.500 million obtained on 1 March 2018. The loan carries a mark-up of 18% payable annually. The surplus funds available from the loan were invested in a saving account and earned Rs.17 million during capitalization period.

(iv) 31 December 2018, the revalued amount of office building was assessed at Rs.178 million by Precise Valuers, an independent valuation firm. Value in use of the office building as at 31 December 2018 was estimated at Rs.186 million.

(v) Other relevant details are as follows:

Assets	Depreciation method	Life/rate	Subsequent measurement
Office building	Straight line	20 years*	Revaluation
Equipment	Reducing balance	20%	Cost
Manufacturing plant	Straight line	15 years	Cost

* ***Remaining life at the date of last revaluation***

ML accounts for revaluation on net replacement value method and transfers the maximum possible amount from revaluation surplus to retained earnings on an annual basis.

Required:

In accordance with IFRSs, prepare a note on 'Property plant and equipment' for inclusion in ML's financial statements for the year ended 31 December 2018.

(Comparatives figures and column for total are not required)

(17)

QUESTION-13

{Autumn 2019, Q # 6}

Following information pertains to non-current assets of Distaghil Limited (DL):

(i) DL purchased specialised vehicles for Rs.370 million on 1 July 2017. The vehicles have an estimated useful life of 10 years with residual value of Rs.30 million.

The revalued amounts of the vehicle as at 31 December 2018 and 2019 were determined at Rs.302 million and Rs.290 million respectively. There was no change in useful life or residual value.

(ii) DL setup a manufacturing plant in a remote area at a cost of Rs.280 million. The plant had a useful life of 8 years. The plant was purchased on 1 January 2018 and was available for use on 1 April 2018. The commercial production started on 1 June 2018.

On 1 July 2018, DL received a government grant of Rs.120 million towards the cost of the plant. The sanction letter states that if DL ceases to use the plant in the remote area before 31 December 2021, DL would be required to repay the grant in full.

(iii) A warehouse was given on rent on 1 January 2018. Previously, the warehouse was in use of DL.

On 1 January 2018, carrying value and remaining useful life of the warehouse was Rs.80 million and 16 years respectively. Fair value of the warehouse on various dates are as follows:

	Rs. in million
01 January 2018	104
31 December 2018	96
31 December 2019	115

Other information:

- DL uses cost model for subsequent measurement of property, plant and equipment except for specialised vehicles for which revaluation model is used.
- DL transfers the maximum possible amount from the revaluation surplus to retained earnings on an annual basis.
- Government grant is recorded as deferred income and a part of it is transferred to income each year.
- Investment property is carried at fair value model.

Required:

Prepare relevant extracts from DL's statement of profit or loss and other comprehensive income for the year ended 31 December 2019 and statement of financial position as on that date. **(Show comparative figures)** **(20)**

(Spring 2020 Q.08)

QUESTION-14

Following information pertain to property, plant and equipment of Harappa Industries Limited (HIL) for the year ended 30 June 2020:

Assets	Balance as on 30 June 2019			Depreciation method	Useful life/rate
	Cost/revalued amount	Accumulated depreciation	Revaluation surplus		
	---------- Rs. in '000 ----------				
Land*	100,000	-	-	-	Infinite
Buildings	70,000	14,000	16,000	Straight line	20 years
Plant	180,000	60,000	-	Straight line	15 years
Vehicles	8,800	4,000	-	Reducing balance	20%

'An amount of Rs. 12 million had been charged to profit or loss upon previous revaluation

(ii) On 30 June 2020, the revalued amounts of the land and buildings were assessed by Smart Consultant at Rs.120 million and Rs.35 million respectively.

(iii) Setting up of a new plant was commenced on 1 July 2019 and substantially completed on 29 February 2020. The plant was available for use on 1 April 2020 and immediately put into use. Useful life of the plant was estimated at 10 years. Details of the cost incurred are as under:

Description	Payment date	Rs. in '000
1st payment	1 August 2019	12,000
2nd payment	1 October 2019	48,000
3rd payment	29 February 2020	48,000
4th payment	31 July 2020	12,000
		120,000

- The cost of the plant was financed through an existing running finance facility with a limit of Rs.200 million carrying mark-up of 12% per annum. A government grant of Rs.20 million related to the plant was received on 1 January 2020. The grant amount was used for repayment of the running facility.

(iv) One of the vehicles had an engine failure on 1 January 2020 and its engine had to be sold as scrap for Rs.0.1 million. The vehicle had been acquired on 1 January 2018 at a cost of Rs.2.5 million. 40% of the cost is attributable to its engine. Though the engine of similar capacity was available at a cost of Rs.1.2 million, the old engine was replaced on 1 January 2020 with a higher capacity engine at a cost of Rs.1.8 million.

(v) HIL uses cost model for subsequent measurement of property, plant and equipment except for land and buildings.

(vi) HIL accounts for revalidation on net replacement value method and transfers the maximum possible amount from revaluation surplus to retained earnings on an annual basis.

(vii) HIL deducts government grant in arriving at the carrying amount of the asset.

Required:

In accordance with IFRSs, prepare a note on 'Property, plant and equipment' for inclusion in HIL's financial statements for the year ended 30 June 2020. **(20)**

(Comparatives figures and column for total are not required)

(Autumn 2020 Q 8)

QUESTION-15

You have recently joined as the finance manager of Corv Limited (CL). While reviewing the draft financial statements for the year ended 31 December 2020 prepared by the junior accountant, you have noted the following

(i) In January 2020, Government allotted an industrial plot to CL at a prime location subject to the condition that CL will establish a factory. CL constructed the factory building which was available for use on 1 October 2020. Due to delay in recruitment of key factory employees, the production activities will commence on 15 March 2021.
The accountant has not recorded the land as it was given free of cost. While the factory building is still appearing in capital work in progress as production activities will commence on 15 March 2021. **(06)**

(ii) CL acquired a three story building on 1 March 2020. CL uses the ground floor for its marketing department while remaining two floors were in excess of CL's need and therefore were rented out. The first floor was rented out on 1 June 2020 and the second floor was rented out on 1 December 2020.
The accountant has recorded the building as property, plant and equipment. The depreciation on ground, first and second floors has been computed from 1 March 2020, 1 June 2020 and 1 December 2020 respectively. **(05)**

(iii) CL is constructing a power generation plant for its factory. The project started on 1 February 2020 and would complete on 30 November 2021. The work remained suspended for 3 months. The project is financed through long term loan, acquired specifically on 1 January 2020. The unutilised amount of loan is kept in a separate saving account.
The accountant has deducted income of separate saving account from full year's interest on loan and presented the net amount as finance cost in the statement of profit or loss. **(05)**

The accounting policy of CL is to carry land and building at fair value (wherever permitted by IFRS).

Required:

Discuss how the above issues should be dealt in the financial statements of CL for the year ended 31 December 2020 in accordance with the requirements of IFRSs.

(Spring 2021 Q 7)

QUESTION-16 {Components of Cost}

Sputnik Sea Limited (SSL) runs a cruise business across oceans. Following information in respect of one of SSL's cruise ship is available:

(i) SSL bought a cruise ship on 1 March 2018. After completing all the required formalities, the ship was ready to sail on 1 April 2018.

(ii) Details regarding components of the ship are as under:

Component	Cost (Rs. in million)	Useful life	Estimated residual value (Rs. in million)
Engine	840	50,000 hours	40
Body	535	25 years	35
Dry-docking (overhaul)	60	5 years	-

(iii) On 1 May 2019, the ship suffered an accident which damaged its body. Repair work took 2 months and costed Rs. 26 million. The repair work did not change useful life and residual values of the components.

(iv) The average monthly sailing of the ship during the last three years are as under:

Year	Hours
2018	360
2019	480
2020	600

(v) SSL uses revaluation model for subsequent measurement. SSL accounts for revaluation on net replacement value method and transfers the maximum possible amount from the revaluation surplus to retained earnings on an annual basis.

(vi) The revalued amounts of the ship as at 31 December 2019 and 2020 were determined as Rs. 1,400 million and Rs. 1,000 million respectively. Revalued amounts are apportioned between the components on the basis of their book values before the revaluation.

Required:

Prepare necessary journal entries to record the above transaction from the date of acquisition of the ship to the year ended 31 December 2020. **(17)**

(Spring 2021 Q 8)

QUESTION-17

Following information pertains to property, plant and equipment of Tsuki Limited (TL):

	Office building	Warehouse
Acquisition:		
• Date of acquisition	1 July 2017	1 July 2018
• Cost **(Rs. in million)**	96	156
• Estimated useful life **(in years)**	16	12
Revalued amount:		
• 1 January 2019 **(Rs. in million)**	116	138
• 1 January 2021 **(Rs. in million)**	80	143
Revised useful life on 1 January 2020 **(in years)**	9	14

Additional information:

(i) TL uses revaluation model for subsequent measurement and accounts for revaluation on net replacement value method.

(ii) TL transfers maximum possible amount from the revaluation surplus to retained earnings on an annual basis.

(iii) The revalued amounts were determined by Sagheer Valuers (Private) Limited, an independent valuation company.

Required:

In accordance with IFRSs, prepare a note on 'Property, plant and equipment' (including comparative information) for inclusion in TL's financial statements for the year ended 31 December 2021. (Column for total is not required)

(18)

(Spring 2022 Q 9)

ICAP PAST PAPER SOLUTIONS

Answer-1

Plant will be capitalized at cost of Rs. 290.9 Million.

	Rs in million
Invoice value	250
LC opening charges	1
Import duty	25
Clearing & transportation	5
Site preparation (2 + 3 – 0.8)	4.2
Test run cost (6 – 1.2)	4.8
Factory manger salary (250,000 x 3 x 30%)	0.225
	290.225

(i) Sales tax recoverable is not a part of cost of asset.
(ii) It is not necessary to damage equipment for plant installation so it is excluded from cost.
(iii) Admin and general overheads are not a part of cost of asset.
(iv) Staff training cost is not a part of cost of asset because we do not have control over it.

Depreciation Expense = (290.225 /15 years) × 8/12 = 12.89 Million.

Answer-2

(a) **Service hour method**

Depreciation expense = Cost – Residual Value × $\frac{\text{Hours in current year}}{\text{Total hours expected}}$

Depreciation-1992 = (750,000 – 30,000) × $\frac{4,200}{25,000}$ = 120,960

(b) **Productive output method**

Depreciation expense = Cost – Residual Value × $\frac{\text{Units in current year}}{\text{Total units expected}}$

Depreciation-1992 = (750,000 – 30,000) × $\frac{80,000}{400,000}$ = 144,000

(c) **Sum of year's digit method**

Depreciation expense = Cost – Residual Value × $\frac{6}{(6+5+4+3+2+1)}$

Depreciation-1992 = (750,000 – 30,000) × $\frac{6}{21}$ = 205,714

Answer-3

(a)(i) **Calculation of depreciation expense using straight line method**

Depreciation expense = $\frac{\text{Cost – Residual Value}}{\text{Useful life}}$ X $\frac{\text{No. of months in use}}{12}$

Depreciation - 2002 (April - December)	=	$\frac{(1,120,000 - 112,000)}{4}$	X	$\frac{9}{12}$	= 189,000
Depreciation - 2003	=	$\frac{(1,120,000 - 112,000)}{4}$	X	$\frac{12}{12}$	= 252,000
Depreciation - 2004	=	$\frac{(1,120,000 - 112,000)}{4}$	X	$\frac{12}{12}$	= 252,000
Depreciation - 2005	=	$\frac{(1,120,000 - 112,000)}{4}$	X	$\frac{12}{12}$	= 252,000
Depreciation - 2006 (January - March)	=	$\frac{(1,120,000 - 112,000)}{4}$	X	$\frac{3}{12}$	= 63,000

(ii) **Calculation of depreciation expense using usage method**

Depreciation expense = Cost - Residual Value x Hours in current year / Total hours expected

Total expected hours	= 4,000 + 5,000 + 5,000 + 5,000 + 1,000	=	20,000
Depreciation - 2002	= (1,120,000 – 112,000) × 4,000/20,000	=	201,600
Depreciation - 2003	= (1,120,000 – 112,000) × 5,000/20,000	=	252,000
Depreciation - 2004	= (1,120,000 – 112,000) × 5,000/20,000	=	252,000
Depreciation - 2005	= (1,120,000 – 112,000) × 5,000/20,000	=	252,000
Depriciation-2006	= (1,120,000 – 112,000) × 1,000/20,000	=	50,400

(b)

Machine a/c

Dr.			Cr.
b/d	1,120,000	Disposals (bal.)	1,120,000
		Closing balance (c/d)	-
	1,120,000		1,120,000

Provision for depreciation-machine account

Dr.			Cr.
Disposals (1,120,000 – 112,000) × 1.25 / 4 years	315,000	b/d (part – (i) solution)	189,000
Closing	-	Depreciation (as below)	126,000
	315,000		315,000

Depreciation – 2003 = (1,120,000 - 112,000)/4 × 6/12 = 126,000

Machinery Disposal account

Dr.			Cr.
Machine – cost	1,120,000	Accumulated depreciation	315,000
		Cash	800,000
		P and L (bal.)	5,000
	1,120,000		1,120,000

Answer-4

(a)

The cost of an item of property, plant and equipment shall be recognized as an asset if and only if:

(a) It is probable that future economic benefits associated with the item will flow to the entity; and

(b) The cost of the item can be measured reliably.

An item which is revalued shall be carried at a revalued amount which is its fair value at the date of the revaluation less any subsequent accumulated depreciation and accumulated impairment losses.

(b)

Statement of Financial position (Extracts)

	2015	2014	Rs. 2013
Machinery	*11,194,000	9,441,000	9,441,000
Less: Accumulated Depreciation	(5,210,294)	(4,015,266)	(1,544,333)
	5,983,706	5,425,734	7,896,667

* 9,441,000 + 1,753,000 = 11,194,000

Income Statement (Extracts)	2015	2014	2013
Expenses			
Depreciation	1,195,028	2,470,933	1,544,333
Staff training expense			351,000
Maintenance contract expense (528/3)	176,000	176,000	176,000
Other income			
Discount received ((W-2) 8,740,000 × 3%)			262,200

Workings

(W-1) Depreciation expense

2013	((9,441,000 – 175,000) × 2,000/12,000)	1,544,333
2014	((9,441,000 – 175,000) × 3,200/12,000)	2,470,933
2015	[(5,425,734 + 1,753,000) – 350,000] × 1,400 /8,000	1,195,028
	Written down value at the time estimate is changed (9,441,000 – 1,544,333 – 2,470,933)	5,425,734

(W-2) Cost of asset

List price	9,200,000
Less: Trade discount (9,200,000 × 5%)	(460,000)
	8,740,000
Freight charges	263,000
Electrical installation	245,000
Pre-production testing	193,000
	9,441,000

Answer-5

Entries

Date	Description	Dr.	Cr.
July 1, 2010	Plant	500	
	Cash		500
Jun. 30, 2011	Depreciation (500/10)	50	
	Accumulated depreciation		50
July 1, 2011	Accumulated depreciation	50	
	Plant		50
July 1, 2011	Plant	125	
	Revaluation surplus		125
Jun. 30, 2012	Depreciation (575/9)	63.89	
	Accumulated depreciation		63.89
Jun. 30, 2012	Revaluation surplus (125/9)	13.89	
	Retained earnings		13.89
July 1, 2012	Accumulated depreciation	63.89	
	Plant		63.89
July 1, 2012	Revaluation surplus (125 – 13.89)	111.11	
	P/L	10	
	Plant		121.11
Jun. 30, 2013	Depreciation (390/8)	48.75	
	Accumulated depreciation		48.75
July 1, 2013	Accumulated depreciation	48.75	
	Plant		48.75
July 1, 2013	Plant	38.75	
	Revaluation surplus		30
	P/L (SOCI)		8.75

Jun. 30, 2014	Depreciation (380/7)	54.29	
	Accumulated depreciation		54.29
Jun. 30, 2014	Revaluation surplus (30/7)	4.29	
	Retained earnings		4.29

(W-1) Calculation of revaluation surplus and depreciation on plant

Date	Description	Plant	R. Surplus	SOCI(P/L)
		----------Rs. in 'million----------		
1/7/10	Cost	500.00		
30/06/11	Depreciation (500/10)	(50.00)		
30/06/11	WDV	450.00		
1/7/11	Revaluation surplus (bal.)	125.00	125.00	
1/7/11	Revalued amount	575.00	125.00	
30/06/12	Depreciation (575/9):(125/9)	(63.89)	(13.89)	-
30/06/12	WDV	511.11	111.11	-
1/7/12	Revaluation surplus (bal.)	(121.11)	(111.11)	(10.00)
1/7/12	Revalued amount	390.00	-	(10.00)
30/06/13	Depreciation (390/8):(10/8)	(48.75)		1.25
30/06/13	WDV	341.25		(8.75)
1/7/13	Revaluation surplus (bal.)	38.75	30.00	8.75
1/7/13	Revalued amount	380.00	30.00	
30/06/14	Depreciation (380/7):(30/7)	(54.29)	(4.29)	
30/06/14	WDV	325.71	25.71	

Answer-6

Entries

Date	Particulars	Dr.	Cr.
1/7/2005	Plant	200.00	
	Cash		200.00
30/6/2006	Depreciation	10.00	
	Accumulated depreciation		10.00
1/7/2006	Accumulated depreciation	10.00	
	Plant		10.00
1/7/2006	Plant	40.00	
	Revaluation surplus (OCI)		40.00
30/6/2007	Depreciation	12.11	
	Accumulated depreciation		12.11
30/6/2007	Revaluation surplus (40.00/19)	2.11	
	Retained earnings		2.11
1/7/2007	Accumulated depreciation	12.11	
	Plant		12.11
1/7/2007	Revaluation surplus	37.89	
	P/L	10.00	
	Plant		47.89

30/6/2008	Depreciation	9.44	
	Accumulated depreciation		9.44
1/7/2008	Accumulated depreciation	9.44	
	Plant		9.44
1/7/2008	Plant	19.44	
	Revaluation surplus		10.00
	P/L		9.44
30/6/2009	Depreciation	10.59	
	Accumulated depreciation		10.59
30/6/2009	Revaluation surplus	0.59	
	Retained earnings		0.59

(W-l) Calculation of revaluation surplus and depreciation on building

Date	Description	Plant	Rev. Surplus	SOCI(P/L)
		----------Rs. in 'million----------		
1/7/05	Cost	200.00		
30/06/06	Depreciation (200/20)	(10.00)		
30/06/06	WDV	190.00		
1/7/06	Revaluation surplus (bal.)	40.00	40.00	
1/7/06	Revalued amount	230.00	40.00	
30/06/07	Depreciation (230/19):(40/19)	(12.11)	(2.11)	-
30/06/07	WDV	217.89	37.89	-
1/7/07	Revaluation surplus (bal.)	(47.89)	(37.89)	(10.00)
1/7/07	Revalued amount	170.00	-	(10.00)
30/06/08	Depreciation (170/18):(10/18)	(9.44)		0.56
30/06/08	WDV	160.56		(9.44)
1/7/08	Revaluation surplus (bal.)	19.44	10.00	9.44
1/7/08	Revalued amount	180.00	10.00	
30/06/09	Depreciation (180/17):(10/17)	(10.59)	(0.59)	
30/06/09	WDV	169.41	9.41	

(W-2)

T- account are not a part of requirement, these are only prepared for understanding purpose of students.

Plant Account

Dr.					Cr.
1-7-2005	Cash	200.00	30-6-2006	c/d	200.00
1-7-2006	b/d	200.00	1-7-2006	Acc. depreciation	10.00
1-7-2006	Rev. surplus	40.00	30-6-2007	c/d	230.00
1-7-2007	b/d	230.00	1-7-2007	Acc. depreciation	12.11
			1-7-2007	Rev. surplus	37.89
			1-7-2007	P/L	10.00
			30-6-2008	c/d	170.00
1-7-2008	b/d	170.00	1-7-2008	Acc. depreciation	9.44
1-7-2008	Rev. surplus	10.00			
1-7-2008	P/L	9.44	30-6-2009	c/d	180.00

(W-3)

Dr. Accumulated Depreciation account **Cr.**

30-6-2006	c/d	10.00	30-6-2006	Dep. Expense	10.00
1-7-2006	Plant	10.00	1-7-2006	b/d	10
30-6-2007	c/d	12.11	30-6-2007	Dep. Expense	12.11
1-7-2007	Plant	12.11	1-7-2007	b/d	12.11
30-6-2008	c/d	9.44	30-6-2008	Dep. Expense	9.44
1-7-2008	Plant	9.44	1-7-2008	b/d	9.44
30-6-2009	c/d	10.59	30-6-2009	Dep. Expense	10.59

(W-4)

Dr. Revaluation Surplus account **Cr.**

30-6-2007	Retained Earnings	2.11	1-7-2006	Plant	40.00
30-6-2007	c/d	37.89			
1-7-2007	Plant	37.89	1-7-2007	b/d	37.89
30-6-2008	c/d	--			
30-6-2009	Retained Earnings	0.59	1-7-2008	Plant	10.00
30-6-2009	c/d (Bal. Fig.)	9.41			

Answer-7

Office building

Rs. in '000'

Date	Description	Building	Rev. Surplus	SOCI(P/L)
1/7/13	Opening book value	5,500		
30/6/14	Depreciation (6,000/12)	(500)		
30/6/14	WDV	5,000		
30/6/14	Revaluation surplus (bal.)	750	750	
30/6/14	Revalued amount	5,750	750	
30/6/15	Depreciation (5,750/8) : (750/8)	(719)	(94)	
30/6/15	WDV	5,031	656	

Factory building

Date	Description	Building	Rev. Surplus	SOCI(P/L)
1/7/13	Opening book value	3,960		
30/6/14	Depreciation (4,400/10)	(440)		
30/6/14	WDV	3,520		
30/6/14	Revaluation surplus (bal.)	(200)		(200)
30/6/14	Revalued amount	3,320		(200)
30/6/15	Depreciation (3,320/9) : (200/9)	(369)		22
30/6/15	WDV	2,951		(178)

Warehouse

Date	Description	Building	Rev. Surplus	SOCI(P/L)
1/7/13	Opening book value	4,050		
30/6/14	Depreciation (4,500/10)	(450)		
30/6/14	WDV	3,600		
30/6/14	Revaluation surplus (bal.)	(250)		(250)
30/6/14	Revalued amount	3,350		(250)
30/6/15	Depreciation (3,350/8) : (250/8)	(419)		31
30/6/15	WDV	2,931		(219)

PQR Enterprise
Journal entries for the year ended June 30, 2014 & 2015

Rs. in '000'

Office Building

Date	Particulars	Dr.	Cr.
30/6/14	Depreciation expense	500	
	Accumulated depreciation		500
	(Recording of depreciation on office building)		
30/6/14	Accumulated depreciation (500 + 500)	1,000	
	Office Building		1,000
	(Transfer of accumulated depreciation to office building)		
30/6/14	Office Building	750	
	Revaluation surplus		750
	(Recording of revaluation surplus)		
30/6/15	Depreciation expense	719	
	Accumulated depreciation		719
	(Recording of depreciation on office building)		
30/6/15	Revaluation Surplus	94	
	Retained earnings		94
	(Transfer of remaining revaluation surplus to retained earnings)		

Factory Building

Date	Particulars	Dr.	Cr.
30/6/14	Depreciation expense	440	
	Accumulated depreciation		440
	(Recording of depreciation on factory building)		
30/6/14	Accumulated depreciation (440 + 440)	880	
	Factory Building		880
	(Transfer of accumulated depreciation to factory building)		
30/6/14	P/L account	200	
	Factory Building		200
	(Recording of revaluation deficit)		
30/6/15	Depreciation expense	369	
	Accumulated depreciation		369
	(Recording of depreciation on factory building)		

Warehouse

Date	Particulars	Dr.	Cr.
30/6/14	Depreciation expense	450	
	Accumulated depreciation		450
	(Recording of depreciation on warehouse)		
30/6/14	Accumulated depreciation (450 + 450)	900	
	Warehouse		900
	(Transfer of accumulated depreciation to warehouse)		
30/6/14	P/L account	250	
	Warehouse		250
	(Recording of revaluation deficit)		
30/6/15	Depreciation expense	419	
	Accumulated depreciation		419
	(Recording of depreciation on warehouse)		

Answer-8

Property Plant & Equipment

Note:

	2016		2015	
	Building	**EQ**	**Building**	**EQP**
Cost				
Opening balance	456	85	450	50
Add: Addition/revered	(24)	-	(22.5)	35
Add: Rev/(Rev)	(54)	-	28.5	-
Less: Disposal	-	(25)	-	-
Closing balance	378	60	456	85
Depreciation				
Opening balance	24	10.96	22.5	5
Dep expense for year	21	6.3915	24	5.96
Disposal	-	(5.7625)	-	-
Rev Surplus	(24)	-	(22.5)	-
Closing balance	21	11.589	24	10.96
WDV	357	48.411	432	74.04

Dep rate	**5% (20 year)**	**10% (10 year)**	**5% (20 year)**	**10% (10 year)**
	Rev model S.L Method	Cost model WDV Method	Rev model S.L Method	Cost model WDV Method

(W-1)

Date	**Description**	**Building**	**Rev Sur**	**P/L**
01/01/14	Cost	450		
31/12/14	Dep 450/20	(22.5)		
31/12/14	WDV	427.5		
01/01/15	Rev Surplus	28.5	28.5	
01/01/15	Rev Amount	456	28.5	
31/12/15	Dep	(24)	(1.5)	
31/12/15	WDV	432	27	
01/01/16	Rev Surplus	(54)	(27)	(27)
01/01/16	Rev Amount	378		(27)
31/12/16	Dep	(21)		1.5
31/12/16	WDV	357		(25.5)

Building A/C

	Rs.		Rs.
01/01/14 Cash	450	31/12/14 bal c/d	450
01/01/15 bal b/d	450	01/01/15 ACC dep	22.5
01/01/15 Rev Sur	28.5	31/12/15 c/d	456
	478.5		478.5
01/01/16 bal b/d	456	01/01/16 Revaluation Surplus	27
		01/01/16 P/L	27
		01/01/16 Acc Dep	24
		31/12/16 Bal c/d	378
	456		456

Acc dep A/C

	Rs.		Rs.
		01/01/14 b/d	-
31/12/14 c/d	22.5	31/12/14 Depreciation	22.5
	22.5		22.5
01/01/15 Building	22.5	01/01/15 bal b/d	22.5
31/12/15 bal c/d	24	31/12/15 Depreciation	24
	46.5		46.5
01/01/16 Building	24	01/01/16 bal b/d	24
31/12/16 bal c/d	21	31/12/16 Depreciation	21
	45		45

Revaluation Surplus A/C

	Rs.		Rs.
31.12.15 Retained earning	1.5	01.1.15 Building	28.5
31/12/15 bal c/d	27		
	28.5		28.5
01.01.16 Building	27	01.01.16 bal b/d	27
31/12/16 bal c/d	-		
	27		27

Retained earnings A/C

	Rs.		Rs.
31/12/15 bal c/d	1.5	31/12/15 Rev Sur	1.5
31/12/16 bal c/d	1.5	01/01/16 bal b/d	1.5
	1.5		1.5

(W-2)

Equipment A/C

		Rs.			Rs.
01/01/14	cash	50	31/12/14	c/d	50
01/01/15	b/d	50			
01/08/15	cash	35	31/12/15	c/d	85
		85			85
01/01/16	b/d	85	30/06/16	Disposal	25
			31/12/16	c/d	60
		85			85

(W-3)

Accumulated dep A/C

		Rs.			Rs.
			01/01/14	b/d	-
31/12/14	bal c/d	5	31/12/14	c/d	5
		5			5
			01/01/15	b/d	5
31/12/15	bal c/d	10.96	31/12/15	dep	5.96
		10.96			10.96
30/06/16	Disposal (w-4)	5.7625	01/01/16	b/d	10.96
31/12/15	c/d	11.589	31/12/16	dep	6.3915
		17.3515			17.3515

(W-4) Accumulated Depreciation of disposal asset

Date	Dep exp	Dep exp
01/01/14	25	25
31/12/14	(2.5)	(2.5)
	22.5	22.5
31/12/15	(2.25)	(2.25)
	20.25	20.25
30/06/16		(1.10125)
		19.2375
31/12/16	(2.025)	
	18.225	

Acc dep = Cost-WDV = 25 – 19.2375 = 5.7625

(W-5) Addition of Equipment

01/08/15	Cost	35
31/12/15	Dep × 10% × 5/12	(1.46)
31/12/15	WDV	33.54
31/12/16	Dep × 10%	(3.354)
31/12/16	WDV	30.186

Answer-9

(a)

Date	Particulars	Dr.	Cr.
31-12-13	Building	17	
	Revaluation surplus		17
	(Recording of revaluation surplus)		
31-12-15	Revaluation surplus	13	
	P/L	26	
	Building		39
	(Recording of revaluation loss)		
31-12-17	Building	23	
	Revaluation surplus		5
	P/L		18
	(Recording of revaluation surplus)		

(W-1)

Date	Description	Building	Rev surplus	P/L
1-7-12	Cost	360		
31-12-12	Dep (360/10 × 6/12)	(18)		
31-12-12	WDV	342		
31-12-13	Dep (342/9.5)	(36)		
31-12-13	WDV	306		
31-12-13	Rev surplus	17	17	
31-12-13	Rev amount	323	17	
31-12-14	Dep(323/8.5)/(17/8.5)	(38)	(2)	
31-12-14	WDV	285	15	
31-12-15	Dep (285/7.5)/(15/7.5)	(38)	(2)	
31-12-15	WDV	247	13	
31-12-15	Rev surplus	(39)	(13)	(26)
31-12-15	Rev amount	208		(26)
31-12-16	Dep (208/6.5)/(26/6.5)	(32)		4
31-12-16	WDV	176		(22)
31-12-17	Dep (176/5.5)/(22/5.5)	(32)		4
31-12-17	WDV	144		(18)
31-12-17	Rev surplus	23	5	18
31-12-17	Rev amount	167	5	-

(b)

	Particulars	Dr.	Cr.
(1)	Asset (new)(8.5 – 1.1)	7.4	
	Cash	1.1	
	Acc. Dep.	3.9	
	Asset(old)		10.3
	Gain(bal)		2.1
(2)	Asset(new)	9	
	Acc.dep(12.4 – 7.3)	5.1	
	P/L bal	0.4	
	Asset(old)		12.4
	Cash		2.1

(3)	Asset(new)	3.4	
	Acc dep	11.1	
	Asset (old)		14.5

Answer-10

Machine Account - Cost

		Rs.			Rs.
1-1-17	Balance b/d	800,000	30-4-17	Disposal (W-1.1)	52,000
1-1-17	Bank (W-2)	80,000	30-6-17	Disposal	65,000
1-1-17	Disposal. (TIA) (W-2)	40,000	31-12-17	Balance c/d	803,000
		920,000			920,000

Accumulated Depreciation Account

		Rs.			Rs.
30-4-17	Disposal (W-1.2)	21,662	1-1-17	Balance b/d	333,000
30-6-17	Disposal (W-3)	15,810	31-12-17	Depreciation(W-4)	71,868
31-12-17	Balance c/d	367,396			
		404,868			404,868

Disposal Account

	Rs.		Rs.
Machine	52,000	Acc. depreciation	21,662
Bank	5,000	Bank	34,000
Machine	65,000	Acc. depreciation	15,810
		Machine	40,000
		Loss on disposal	10,528
	122,000		122,000

WORKINGs

(W-1)

1-1-14	Cost	100		
31-12-14	Dep 100 × 15%	(15)		
31-12-14	WDV	85		
31-12-15	Dep 85 × 15%	(12.75)		
31-12-15	WDV	72.25		
31-12-16	Dep 72.25 × 15%	(10.84)		
31-12-16	WDV	61.4125	WDV (Given)	31,935
30-4-17	Dep 61.4125 × 15% × 4/12	(3.07)	Dep 31935 × 15% × 4/12	(1,597)
30-4-17	WDV	58.34	WDV	30,338

(W – 1.1)

		Rs.	%
1-1-17	Cost	52,000	100
	Less Accumulated Depreciation	(20,065)	(38.5875)
	WDV	31,935	61.4125

61.4125 – 31,935

$$1 - \frac{31,935}{61.4125} \times 100 = 52,000$$